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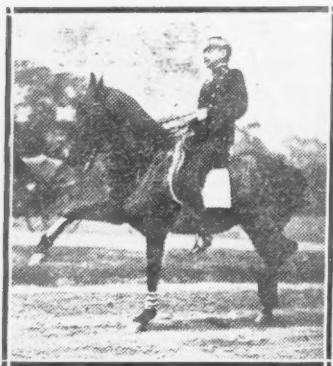
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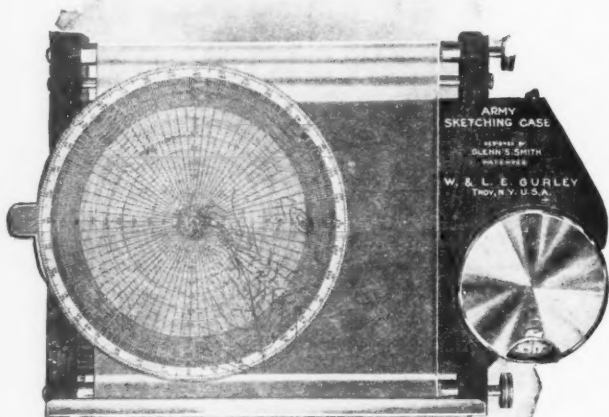
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NOVEMBER, 1912.

No. 93.

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EDITOR.

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THE UNITED STATES ARMY IN THE RIDING COMPETITIONS OF THE OLYMPIC GAMES, STOCKHOLM, SWEDEN 1912.

(Extracts from the official reports of Captain Guy V. Henry, Thirteenth Cavalry and Lieutenant Colonel F. S. Foltz, General Staff.)*

CAPTAIN HENRY'S REPORT.

SPECIAL Order No. 20 of the War Department, Washington, January 24, 1912, detailed the following named officers to constitute a team to represent the United States Army in the Olympic Games at Stockholm, Sweden:

Captain Guy V. Henry, Cavalry unassigned.

First Lieutenant Ben Lear, Jr., Fifteenth Cavalry.

First Lieutenant Jonn C. Montgomery, Seventh Cavalry.

First Lieutenant Ephraim F. Graham, Fifteenth Cavalry.

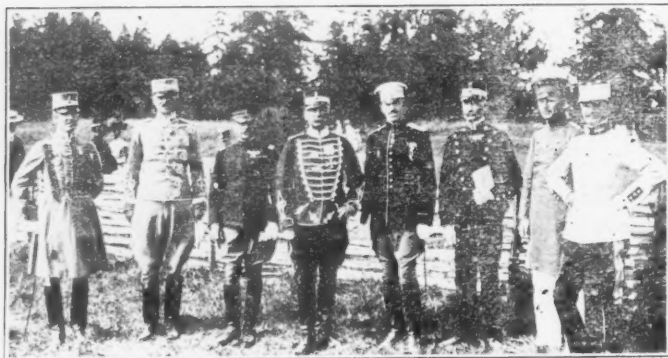
Second Lieutenant John C. Quekemeyer, Fifth Cavalry.

This was the first intimation that had been received that a team was to be sent to the Olympic Games. Upon receipt

*A few minor corrections were made on the receipt of the official score from Stockholm.

of the same at the Mounted Service School, eighteen of the horses considered most suitable for the purpose were selected and training started. Of the officers named above, three were at the Mounted Service School; the other two reported on March 1st and 26th, respectively.

The conditions governing the games were not at first known, and therefore horses which were used for instruction at the Service School were selected. When the conditions became known it was found that these horses could not be used, but they were still continued in training for the purpose of giving the officers practice, and in order to see what was in the horses themselves.



INTERNATIONAL JURY—EQUESTRIAN GAMES.

From left to right: Lieut. Col. COUNT VON ROSEN, Sweden; Lieut. Col. EGEBERG-OTTENSEN, Norway; Lieut. Col. FOLZ, American; the President, Col. NYBLEANS, Sweden; Col. de SCHWEDER, Russia; Lieut. Col. MOLTKE, Denmark; Major von GRESSE, Germany; Major DESTREMAN, France.

March 1st regular work in the riding hall began in schooling the horses and in teaching them to jump quietly over low jumps. Of the eighteen horses originally selected, all of the Mounted Service School horses were gradually eliminated due to their inability to perform the work required.

During March little outdoor work could be done further than walking in the deep snow. With the beginning of April a little more outdoor work on the roads and across country was taken up, but no regular outdoor jumping could be started until

May. Each horse was worked about three and a half hours per day.

Systematic work with the horses was very much handicapped, due to the fact that two of the officers were instructors in the Department of Equitation in the Mounted Service School and one in the Department of Horseshoers and Farriers, these three officers being required to keep up their regular school work and to attempt to do their work with the Swedish horses in addition thereto; also the riding hall was only available for one and a half hours per day for work with the Swedish horses.

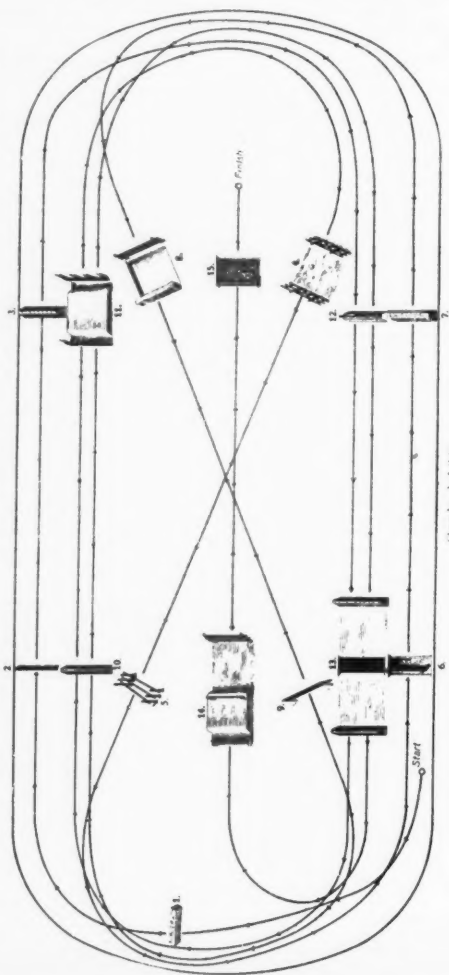
April 1st, First Lieutenant A. L. P. Sands, Sixth Field Artillery, was added to the team as artillery representative. Unfortunately, shortly after this he was badly injured by his horse falling at a jump and was unable to do any further duty for about six weeks. Jumps corresponding to those to be used in the Olympic Games were built at Fort Riley, and commencing about May 10th, horses were practiced over these. (See cuts herewith.) Between this and the date of departure for New York, June 8th, three regular try-outs were had and the final selection of the horses made. About June 1st, Lieutenant Quekemeyer was forced to drop out due to his collar-bone having been broken by his horse falling at one of the obstacles. Lieutenant Sands in the meantime had returned to work. Definite information was then received that the team was to consist of four officers, six horses and three enlisted men, and that all were to sail on the steamship "*Finland*" from New York, June 14th.

The work and trials at Fort Riley convinced us that we would put up a good representation and that our horses were very fair, all round animals, but as horses and as jumpers would hardly be able to compete with those which we expected to meet at Stockholm. The horses finally selected were Chiswell, one of the horses presented to the United States Government a year and a half ago for the purpose of going to the London Horse Show; Deceive, a thoroughbred assigned to Lieutenant Montgomery; Bazen, personal property of Captain Henry; Connie, Poppy and Fencing Girl, regular army horses bought at the contract price.

The competition for which the team worked was the military one which consisted of five separate parts: First, a long

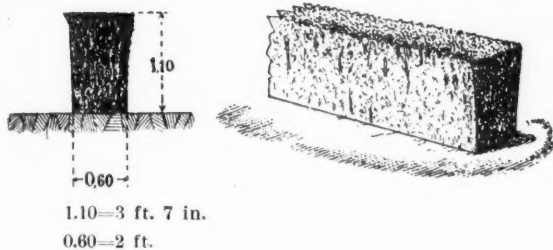
distance ride of about thirty-one miles together with (second) three miles across country. The long distance to be completed in three and three-fourths hours, the cross-country portion of which was to be completed within fifteen minutes. Third, riding over steeple-chase course of two and a half miles with ten obstacles in five minutes and fifty seconds. Fourth, jumping of obstacles shown in the attached plan. (See cut "A").

CUT "A." PRIZE JUMPING IN MILITARY-COMPETITIONS. 15 OBSTACLES.

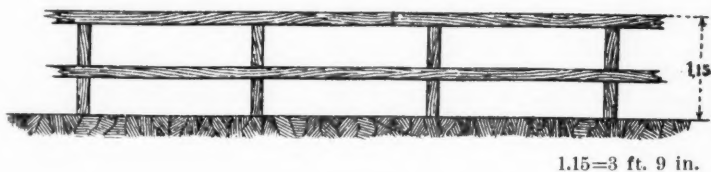


1. Hedge; 2. Fence; 3. Stone Wall; 4. Railway Gates; 5. Triple Bar; 6. Fence in Dike; 7. Hedge and Top Bar; 8. Fence-Dike-Hedge; 9. Fence; 10. Brick Wall; 11. Country Road; 12. Swedish Fence on either side; 13. Stone Wall-Dike; 14. Bank-Fence; 15. Dike.

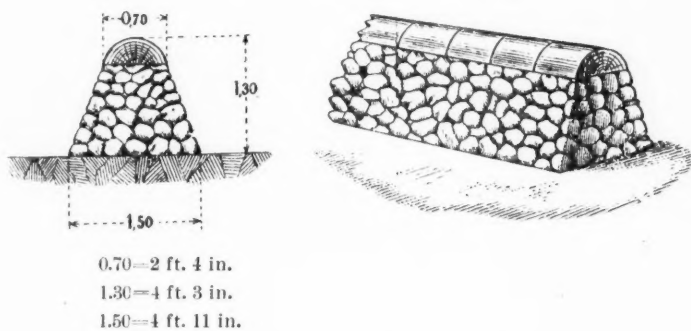
No. 1. HEDGE.



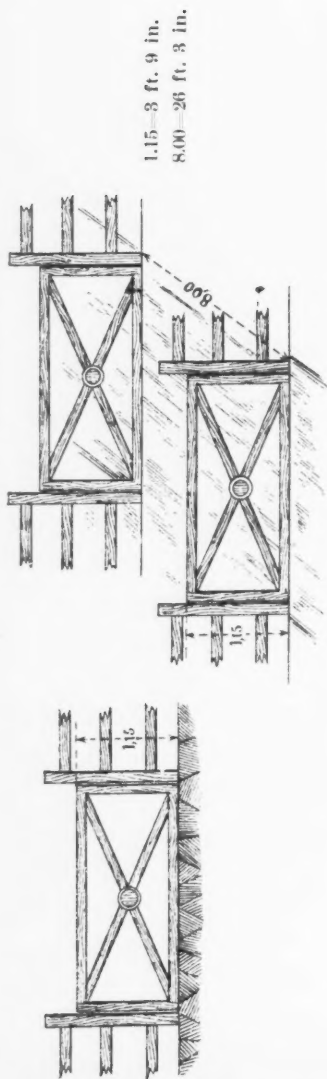
No. 2. FENCE.



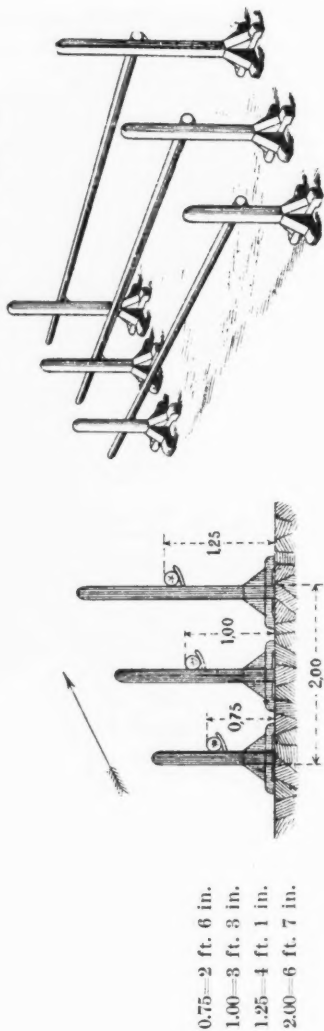
No. 3. STONE-WALL.



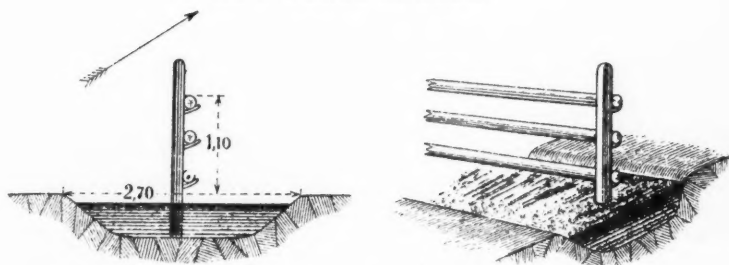
No. 4. FILLWAY GATES.



No. 5. TRIPLE BAR.

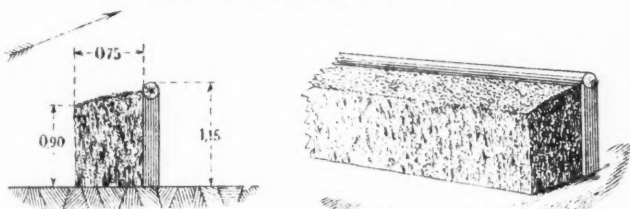


No. 6. FENCE IN DIKE.



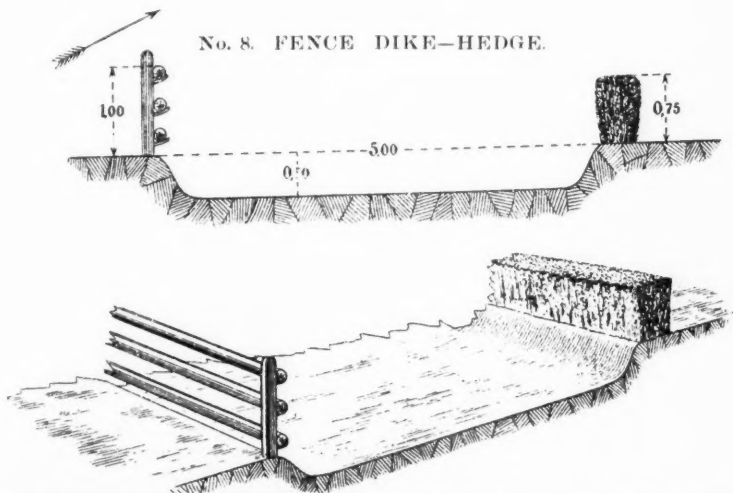
1.10=3 ft. 7 in. 2.70=8 ft. 10 in.

No. 7. HEDGE AND TOP BAR.



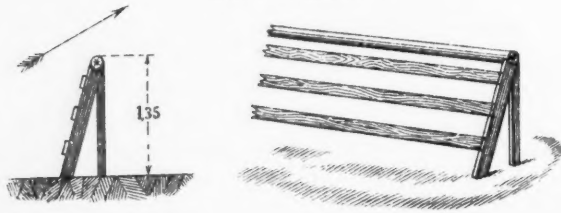
0.75=2 ft. 6 in. 0.90=2 ft. 11 in. 1.15=3 ft. 9 in.

No. 8. FENCE DIKE—HEDGE.



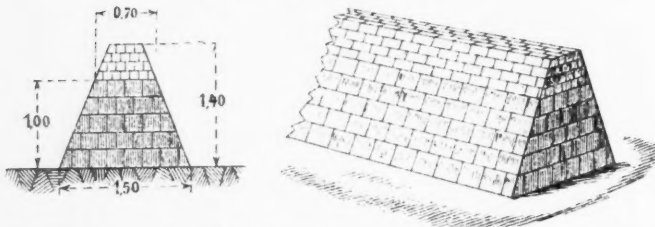
1.00=3 ft. 3 in. 0.50=1 ft. 8 in. 5.00=16 ft. 5 in. 0.75=2 ft. 6 in.

No. 9. FENCE.

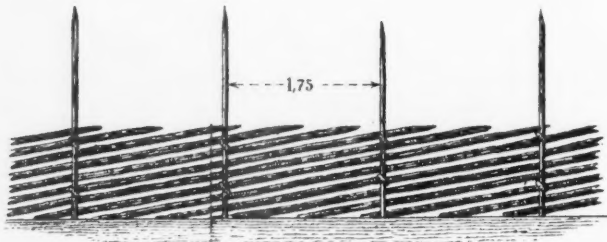
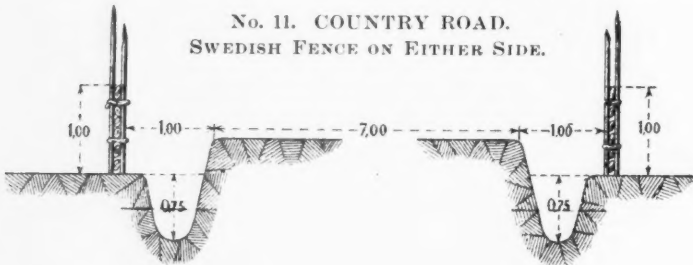


1.35=4 ft. 5 in.

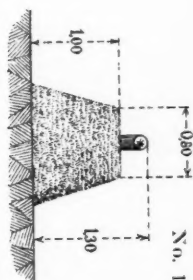
No. 10. BRICK WALL.



0.70=2 ft. 4 in. 1.00=3 ft. 2 in. 1.40=4 ft. 7 in. 1.50=4 ft. 11 in.

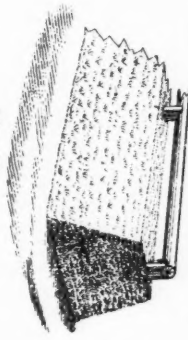
No. 11. COUNTRY ROAD.
SWEDISH FENCE ON EITHER SIDE.

1.00=3 ft. 3 in. 0.75=2 ft. 6 in. 7.00=23 ft. 1.75=5 ft. 9 in.



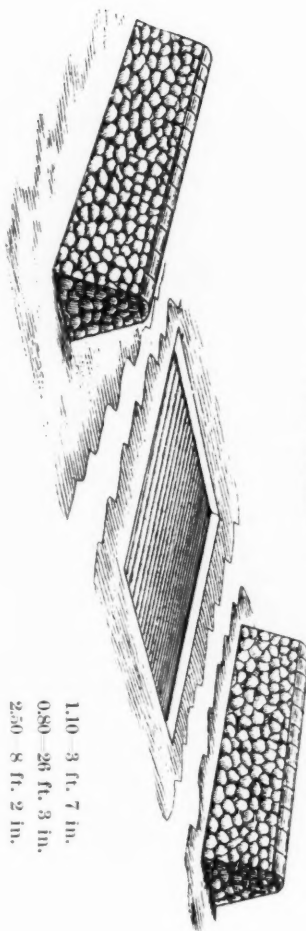
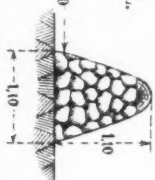
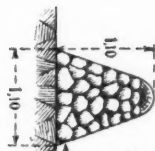
No. 12. EARTH-WALL WITH BAR.

1.00 = 3 ft. 3 in.
0.80 = 2 ft. 7 in.
1.30 = 4 ft. 3 in.



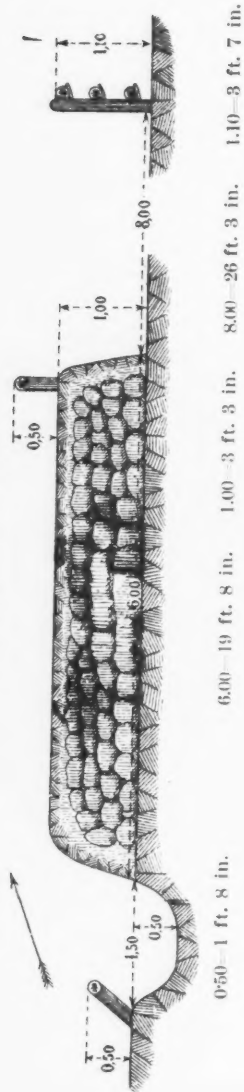
No. 13.

STONE WALL—DIKE—STONE WALL.

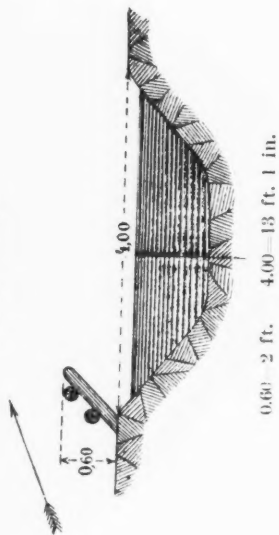


1.10 = 3 ft. 7 in.
0.80 = 2 ft. 3 in.
2.50 = 8 ft. 2 in.

No. 14. BANK-FENCE.



No. 15. DIKE.



Fifth, demonstration of the schooling of the horse and the marking of him on his appearance at all gaits.

All of these tests had to be completed within a certain maximum time, and failure to complete within the maximum time was very heavily penalized. A horse that was capable of completing the above tests must be a thorough military animal; that is, one with strength, endurance, speed, jumping ability and complete training. The horses that we started working with had practically none of these conditions except in the rough and all of them had to be developed within three months and this at a time of the year not well suited for the work. Many horses could have been found which combined one or more of the necessary qualities, but the difficulty was to find a horse which combined *all* of the qualities in a sufficient degree to admit of his entering the team.

The horses left for New York by express on June 10th, arriving there June 12th, and loaded on board the "*Finland*" June 14th. On board the ship they were very comfortable, with plenty of fresh air, and during the trip were exercised by being led from one to one and a half hours a day around a small circle on the lower deck about twenty-five yards in circumference. While this was not much exercise it was of the greatest value to us in the end as it kept their muscles in fair condition and held their gaining of flesh down to some extent. During the entire trip their feed was held low with one large feed of bran mash per day, and to those horses that would eat the same carrots were fed.

The ship arrived at Stockholm, June 30th, horses unloaded and taken to the military stables of one of the artillery regiments. Here we found conditions most excellent and everything possible was done by the Swedish officers to make officers, men and horses comfortable. Forage and stabling was of the best, and the former far superior to that which is obtained in our country.

The competitions were to start on July 13th, thus giving us thirteen days to get our horses into condition for these severe tests.

We found the horses very soft after their trip and capable of doing nothing but slow work for some days. This we tried to make as hard as possible by climbing hills, going through

mud and various things to gradually draw out and harden the muscles.

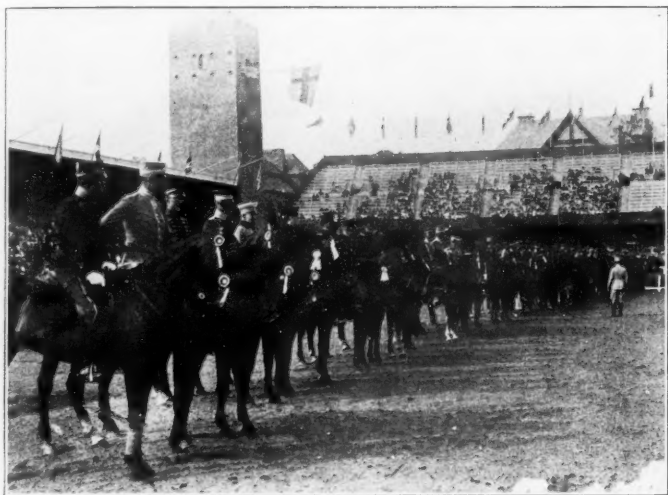
The day of our first competition and second competitions, the long distance and cross country rides, was very hot indeed. The team had been over the road of the long distance ride in an automobile and was therefore fairly conversant with it. All of the various competitors had also been shown the cross country course. We found that the long distance ride of thirty-



ROYAL BOX IN STADIUM.
The King is returning a salute.

one miles was to be the hardest kind of Macadam roads, many places filled with small stones. Nothing could have been harder on horses' feet. The cross-country course of three miles was laid out carefully by flags and the passing on the wrong side, or outside, of which disqualified the rider from further participation in the competitions. The course was plainly laid out and over rolling country containing many twists and turns. It was not an unfair course for a good military horse, but at

the same time it took a good horse to complete it. There were about twenty-five obstacles consisting of all types in the three miles, but the most dangerous thing about the course for horses not familiar with Swedish country was that it was filled with small ditches about one foot and a half wide and two or three feet deep, going across which at speed the horse was likely to step in. The authorities however, had mowed the grass in the vicinity of most of these ditches in order not to make it too unfair to the various foreign competitors. The Swedish horses,



MILITARY CHAMPIONSHIP TEAMS.

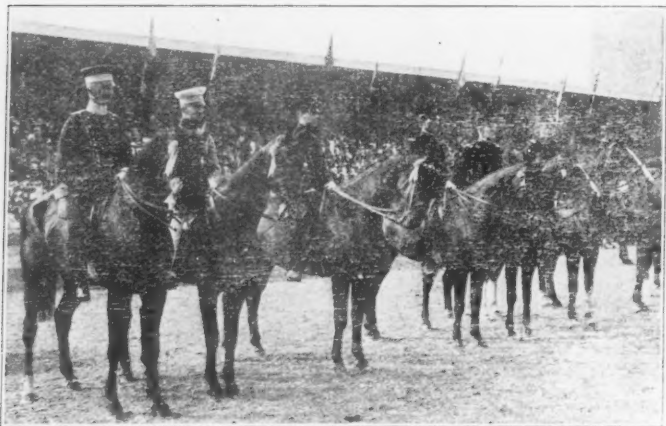
Sweden 1st, Germany 2d, America 3d, France 4th, Belgium, England and Denmark not completing the course. Russia and Norway not entering.

from many falls over this kind of country, had learned to look out for these ditches, whenever they saw a change or an unevenness in the grass, and jumped on the supposition that there was a small ditch there.

Of the twenty-five obstacles referred to, five must be considered as serious. The first a broad ditch with a fence on higher ground on the opposite side. This obstacle in itself was not so much, but the fact that it was the first obstacle and was come on rather suddenly after a hard ride of about twenty-one

miles made it a rather dangerous obstacle for losing points. Another of the serious obstacles was a similar one near the end of the cross-country run. The other three were broad ditches, thirteen to fifteen feet across, one of them with boggy landing. The other a sloping ditch with very deep water at the bottom covered with grass so that on the horses's approaching it looked simply a hollow to be run through instead of an obstacle which must be jumped.

As stated above, the day set for the long distance cross-country rides was very hot indeed. The horses in all of these

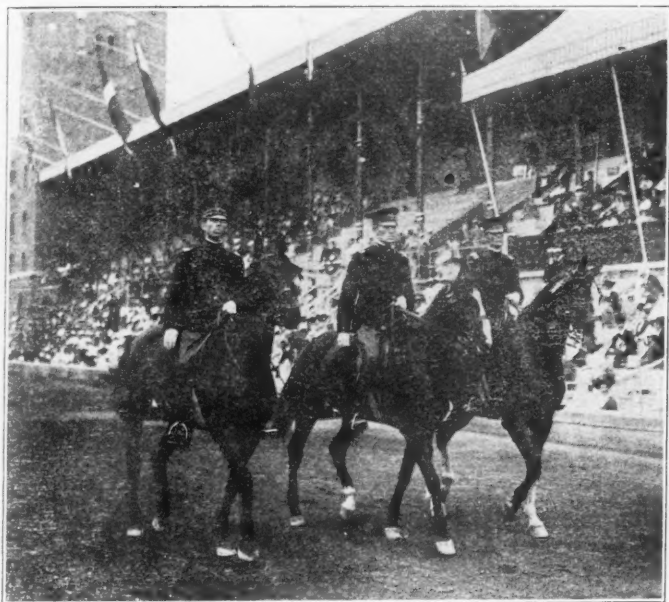


GERMAN TEAM SECOND AND AMERICAN TEAM THIRD IN MILITARY CHAMPIONSHIP.

military tests were required to carry 176½ lbs. For two of our riders, Lieutenant Montgomery and Captain Lear, this weight was very good. Lieutenant Graham was required to carry about sixteen pounds of lead, and Captain Henry twenty-two pounds, in order to make up the required weight. The riders were started with five minutes intervals. The American team had carefully laid off on their map the points which they should reach each half hour after the start in order to keep up their regular rates of speed, and those who were required to carry extra weight carried fitted shoes for their horses in order that

they could be replaced en route in case a shoe were lost. This proved in the case of Captain Henry a very excellent precaution because his horse in the cross-country ride lost a shoe, but, having a fitted shoe it was replaced within about seven minutes and therefore allowed him to complete the long distance ride within the proper time.

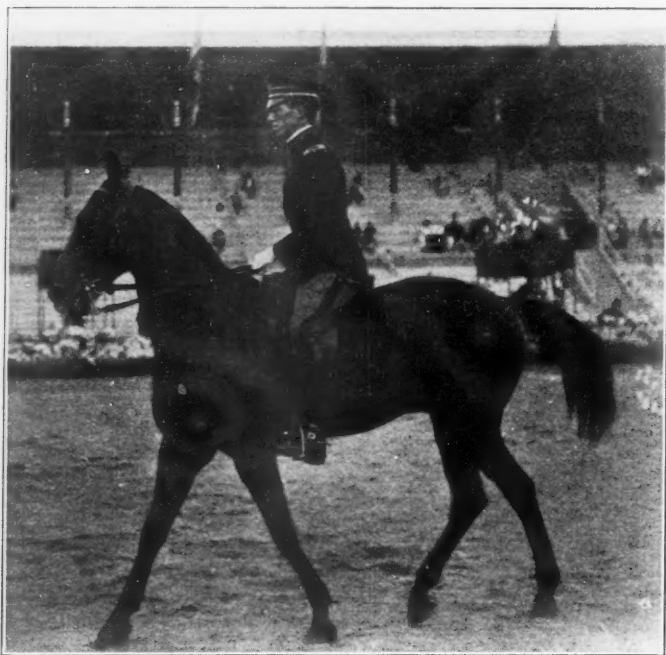
At Fort Riley in practice we found that if in each hour eighteen minutes were spent at the walk, eighteen minutes at



THE AMERICAN TEAM.
Third in Military Championship.

he trot and eighteen minutes at the gallop, with six minute rest, the average rate of speed would be held up with the least exertion to the horse. However, after finding what the course was to be, the hard Macadam roads with the heat of the day, this was changed by the majority of the riders, who rode almost the complete distance (twenty-one miles) to the start of the cross-country ride at the trot with practically no halts, but

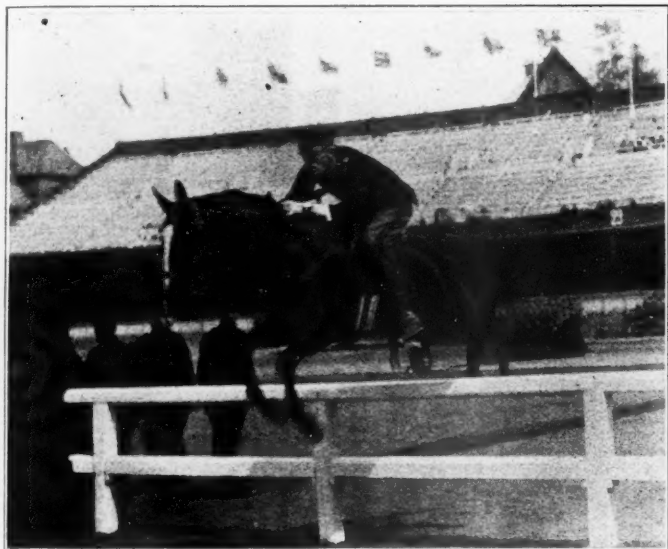
frequently running on foot. The American team on the whole reached their designated half hour points about five minutes behind time and also dismounted and lead for the last five minutes before reaching the beginning of the cross-country course. Two of the riders, Captain Lear and Lieutenant Montgomery, passed over the cross-country course without fault. Lieutenant Graham lost five points by a refusal, his



LIEUTENANT GRAHAM ON "CONNIE."

horse becoming mired at the first obstacle and he himself having to dismount. Captain Henry lost seven points, due to two refusals at the first obstacle. All of the team completed the cross-country run without further faults and on time, most of them completing it considerably within the fifteen minutes allowed.

From the end of the cross-country course to the finish was about ten miles. The various members of the American team were slightly behind time and had to ride faster in the latter ten miles than they did during the first portion of the long distance ride. Captain Henry, due to the loss of a shoe, was fifteen minutes late in leaving the end of the cross-country ride and was therefore required to make this ten miles in forty-three minutes. This he did with ease, with a good steady

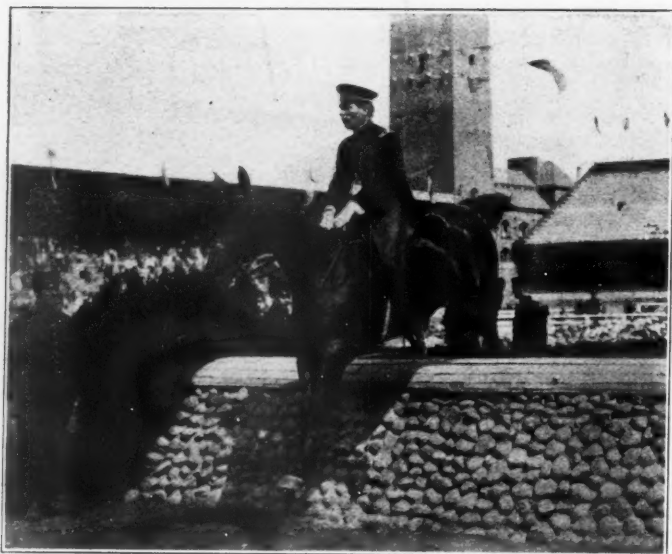


LIEUTENANT MONTGOMERY ON "DECEIVE."

swinging gallop, probably not walking or trotting to exceed one hundred yards during the entire distance. All of the American horses came in on time and received perfect scores for the long distance ride, and all of them in good condition.

Immediately upon returning to the stable all the horses were washed off with warm water and alcohol, and then all of their muscles massaged with alcohol and witch hazel three times during the remainder of the day. White lotion bandages were placed on all of the legs from the knees and hocks down, and

the horses stood in cold water. This was continued until about 9:00 o'clock in the evening, great care being taken in the watering and feeding. The next day all were pretty stiff and sore from the hard pounding which they had had on the Macadam roads. There was, however, before the next competition a day of rest except for half an hour walking in morning and afternoon and a continuation of massage, bandage and water treatment.



LIEUTENANT LEAR ON "POPPY."

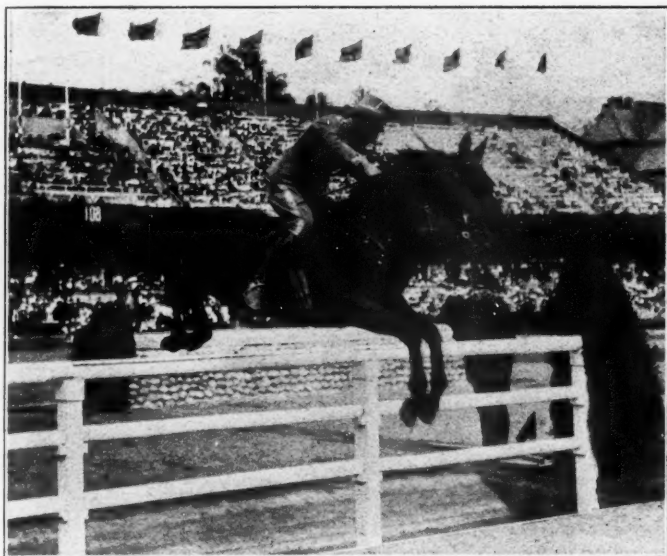
Note that the stone wall is topped by half a log sawn into sections.

The condition of the American horses was, apparently, certainly equal to that of the other nations, with the exception possibly of Germany, whose horses seemed to come in in good condition. All needed reshoeing as most of the shoes had been worn thin as paper by the pounding and grinding over the rocks of the Macadam roads.

Each nation in this military test was allowed to start four competitors, the highest three of which upon the completion

of the tests counted. Russia, Chile and Norway withdrew and did not enter the military tests. The nations starting were England, Sweden, Denmark, Belgium, France, Germany and the United States.

All completed the long distance ride with perfect scores with the exception of France, one member of whose team was behind time on arrival at the finish, and Denmark. The cross-country ride was completed with a perfect score by Germany,



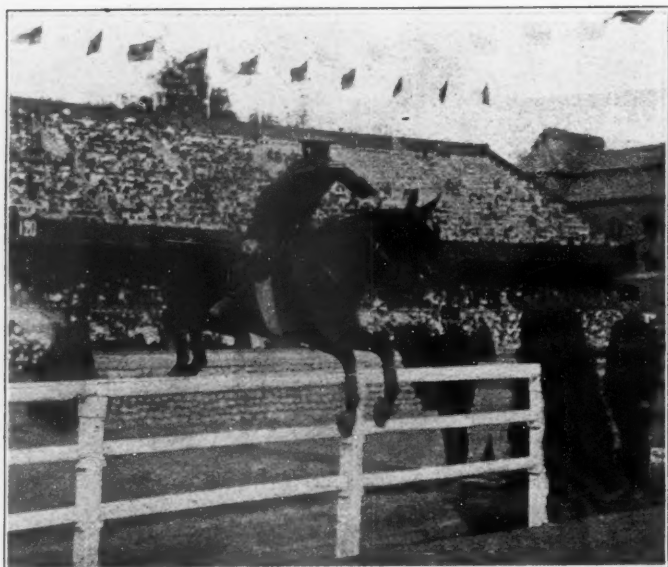
RUSSIAN OFFICER TAKING FENCE IN WET DITCH.

Strip on top of rail, tops of posts and all rails are loose.

Sweden second, Great Britain third, America fourth, France fifth, with one rider eliminated, and Denmark sixth. Belgium was eliminated entirely from the continuation in the contest by two riders being disqualified in the cross-country test.

After the one day's rest referred to the riding over the steeple-chase course was held. In this the various riders rode over the course separately against the maximum time allowance. The same weight, $176\frac{1}{2}$ pounds, was required to be

carried. The day was very hot, and most of the horses showed more or less signs of exhaustion upon completing the test. The American team had carefully laid out the exact points which they should reach at the end of each minute's riding, and carried stop watches on their wrists where they could be easily seen, and tried to ride accurately according to time. The result was that all completed the test within the prescribed time and with their horses in very good condition, although



SWEDISH OFFICER TAKING JUMP.

Note the fir trees at wings.

stiff and sore from the preceding tests. In this test England was eliminated from further participation by one man falling and being too seriously injured to continue, and another man being disqualified for passing on the wrong side of one of the marking flags. The other nations, with the exception of Germany and Great Britain, completed the test with perfect scores, one German and two Englishmen being penalized for not arriving within the maximum time allowance.

The same treatment as to massaging and so forth was given the horses upon the completion of this test, and continued until the next day for Test 4, which was the jumping of obstacles shown in the plan attached. These obstacles were placed in the Olympic Games Stadium and were beautifully constructed and the whole of the surroundings magnificent. Everything connected with the horse-riding competitions was handled by the Swedish Army in the most perfect manner.



CAPTAIN COUNT C. BONDE.

Winner of the individual school riding competition. Note the laurel wreath.

In the jumping competition the following nations entered: Sweden, France, America, Germany, Belgium; Great Britain and Denmark having been eliminated. This competition the American horses completed with very excellent averages. Lieutenant Montgomery, nine faults; Lieutenant Graham, nine faults; Captain Henry, thirteen faults; Captain Lear, fourteen faults; the American team standing second with Ger-

many first, France third and Sweden fourth. This left the teams in the following order for the total tests completed to date: Germany first, America second, Sweden third, France fourth, and with the individual riders standing: a French and a German officer tied for first place; Lieutenant Montgomery tied with a German officer for second place; Captain Lear seventh, Lieutenant Graham eighth, Captain Henry twelfth, out of a total of seventeen officers remaining in the competition.

The next day, the fifth and last test of the military competition, the prize riding, was held. In this the American team did very well, both men and horses. Sweden, however, passed both Germany and the United States, Germany dropping to second place and the United States to third.

This test included the general appearance of the horse and due to the inferiority of the American horses the team lost second place and even a chance for first.

This gave the teams completing the military competition the following order: Sweden first; Germany, second; America, third; France, fourth.

During this entire competition none of the American horses had shown any very great ability, but all of them had put up a very excellent average. They had been ridden with care and judgment, and due to this excellent average they were able to hold the position which they did, losing second place as above stated simply due to the inferiority of the mounts themselves.

Besides the military competition there was the prize riding competition and the prize jumping competition for individuals and for teams. In the prize riding competition, Captain Henry and Lieutenant Montgomery entered with Chiswell and Deceive. Chiswell put up a remarkable performance and his rider was heartily complimented by many present upon the work done. However, the horse as an animal did not rank with the magnificent animals entered in this competition by Germany and Sweden, the result being that Sweden won the first three places, Germany the next, Sweden two more and America thirteenth out of twenty-one entering.

In this prize riding were entered special horses by the other nations, animals which had not taken part in the military competitions.

The next competition was the individual prize jumping. In this the United States entered no horses as they could hardly compete as individuals over a more difficult course than the military with the great jumpers of Europe, especially as these great jumpers in most cases were fresh and had not been through the military contest. This competition was won by France with Germany second and Belgium third.

The next competition was prize jumping for teams of four each, the highest three to count. The United States entered this with Connie ridden by Captain Henry, Poppy by Captain Lear, Deceive by Lieutenant Montgomery. None of these horses had ever jumped this more difficult course, as we had always attempted simply to train them for the course as laid down in the military competition. We were unable to enter the fourth man as we did not consider that we had a fourth horse capable of going over this course. However, we more than surprised ourselves, for we held third place in the competition until the last horse had jumped. In this the American horses went over with Deceive, ten faults, Connie sixteen, Poppy seventeen, a total of forty-three. The total faults of the best three horses of the other nations being Sweden, twenty-five; France, thirty-two; Germany, forty; United States, forty-three; Russia, fifty; Belgium, sixty; Chile Great Britain Norway and Denmark not entering teams.

This completed the horse riding competitions. In addition to these the members of the various nations went in the Stadium on several occasions for presentation to the King of Sweden, display of horsemanship and the presentation of the medals to the winners.

On the whole, I consider the work of the American team to have been most excellent, with comparatively little to pick from in either riders or horses. Their animals were far inferior to those of the nations against which they competed. They had made a long journey of three weeks, during which the horses received very little exercise, and had to drop from a high state

of training to a traveling condition and then be put back into a state of training again.

The work of the riders was without exception of a very high order and fully equalled that of any of the nations against whom they competed. Most of the other nations were represented by well-known horses and well known riders who had taken part in dozens of similar competitions. On hearsay and from questions I asked, I can only state what other nations did to prepare themselves for this competition.

Sweden started several years ago, in a general way, beginning regular work last October. All officers desiring to compete were given an opportunity to do so, and elimination trials were held in the various riding halls. When spring opened five large tests were held. In the first of these about eighty-five officers competed, sixty-five of the horses completing the test. In the succeeding competitions the numbers were gradually reduced until the four or six best men and horses for the various competitions were selected, usually fresh horses being used for each separate competition, as the military, the prize riding and the prize jumping.

In Germany, I am told, for several months past, about sixty-five horses were held at their Hanover Riding School in training for this competition. This, in both horses and men, represented the élite of the German Army. They arrived at Stockholm with about eighteen horses and used different horses for the military, prize riding and prize jumping competitions. Their horses were all magnificent animals, in my opinion the superior of any of the other nations represented.

I do not know how long Russia had been working for these competitions. They were present with about eighteen horses and a number of officers. They withdrew entirely from the military competition, entered only one man in the prize riding competition, but centered their efforts on the individual and team jumping competitions. In both they were unfortunate. Several of the riders I knew in London last year and know that they have been working almost continuously for the Stockholm games.

Two of the four French representatives have international reputations in this line. The same can be said of the Belgian representatives.

The English representatives are also well known in these competitions. One of them, Colonel Kenna, having been in America in competitions several times.

Chile was represented by four men who are at present students at Hanover and did very well in the individual jumping competition.

Of Norway and Denmark, I do not know what work they gave to this beforehand.

All the competitions were extremely severe tests and nothing but the best could complete them.

I think that we should be very much gratified with the results which were obtained by the American team. To show how seriously this work is taken abroad, one of the Swedish officers said to me: "We will take a two weeks' rest, and then we are going to start work to prepare to defend the trophies in the next Olympiad, four years hence, which we have won in this."

COLONEL FOLTZ'S REPORT.

The "*Finland*" had been chartered by the American Olympic Association for the purpose of carrying the American representatives to Stockholm and affording them accommodation during the Olympic games. No second or third class passengers were carried, and the number of passengers booked was well within the accommodations, so that there was ample space and excellent service, and the weather being perfect the competitors were able to keep up practice on deck during the whole voyage and arrived at Stockholm in very good condition. A two days' delay at Antwerp was taken advantage of to put in some hard training ashore, though on account of the difficulty of unloading the horses the animals could not have this advantage.

Captain Guy V. Henry, senior officer of the riding team, has made a most excellent and exhaustive report which I forward herewith, and which makes it unnecessary for me to go into the details of the riding competition. It is due, however,

to Captain Henry, Captain Lear, Lieutenant Montgomery and Lieutenant Graham to emphasize the fact that they entered this contest under the embarrassing condition of being very much outclassed as to horseflesh. They had few animals to select from, and these not of a high character; their time for preparation was short, and as they were not relieved during this preparation from their regular duties it involved excessively hard physical work, the effects of which they all showed when they sailed from New York, but from which the favorable voyage enable them to a great extent to recover before arriving at Stockholm.

From the moment of landing at Stockholm until night on the day of sailing these officers had not a moment of rest, and their success is due to their constant devotion to the work on hand and to their painstaking attention to the minutest details of the training, exercising, feeding, conditioning and shoeing of their horses, and to the minute and scientific manner in which they mastered beforehand the conditions and requirements of each separate part of the competitions before them. The story of the competition as told by Captain Henry shows how other nations, represented by experienced horsemen on magnificent animals, dropped out on account of the failure of the riders to accurately comply with the conditions, some losing their way and others not making their runs on time; while the success of our officers in avoiding these penalties was the reward of painstaking study and constant attention to stop watches and watches carried on the wrist during the actual ride. I saw all the riding, with the exception of the cross-country and long distance ride, when my duty as a member of the international jury confined me to the point where the riders started and finished. I had, however, previously gone over the long distance course with our officers in an automobile, and had seen the cross-country work of the Pentathlon team which resembled the cross-country course of the military ride.

The work of our horses and riders was excellent and elicited great praise from foreign officers. Our standing as second in the long distance ride, the cross-country ride, the steeple-chase, and the jumping is something of which we may well be proud; and we dropped to third place only on the judges

estimate of the schooling, which involved "appearance of horse and rider at walk, trot and gallop," and which therefore gives unlimited scope to the individual opinion of the judges. These opinions might vary reasonably be influenced by preference for a particular style of riding or of horseflesh on the part of the officers judging, of whom three were Swedes, one German, one Norwegian, one Russian and one French.

Our reception by the Swedish authorities was most cordial. On arrival we were met by Lieutenant Count Nils Bonde, of the Royal Horse Guard Regiment, who had been detailed and attached to our party to assist us during our stay in Stockholm. This officer was invaluable to us and was most thoughtful and courteous in the manner in which he performed his duties.

Our horses were stabled very conveniently at the Swedish barracks and our men were provided for in the barrack mess. Forage, veterinary attendance and horse-shoeing was furnished by the Swedish cavalry without charge, and we were in every way made to feel that we were among comrades. As head of the army representation, I was the recipient of many courtesies being invited to dinner by the King, the Crown Prince and by Prince Charles. I append a list of the various entertainments, to which must be added an invitation to a fête given by the Committee of Equestrian Games for visiting officers on the night of July 17th, which we were unfortunately compelled to decline on account of sailing on the "*Finland*."

July 3d. Dinner given by the President of the American Olympic Committee, Colonel Thompson, for the Presidents of the International Olympic Committees.

July 4th. The Solemn Opening of the Session International Olympic Committee in the House of Parliament.

July 6th. Garden Party given by the King and Queen.

July 7th. Official Dinner of the Organization Committee for the functionaries and heads of delegations.

July 11th. Dinner given by the Crown Prince. Gala Performance at the opera, extended by Prince Charles.

July 13th. Afternoon tea and reception given by the Royal Regiment of Horse Guards.

Banquet by the Reception Committee of the Equestrian Games.

July 14th. Dinner given by Prince Charles.

July 15th. Dinner given by Count Oxenstierna, Colonel of the Royal Horse Guard Regiment.

July 16th. Dinner given by the King and Queen.

July 17th. (declined on account of departure.) Fête given by the Committee of Equestrian Games for visiting officers.

In addition to the above official entertainments, the other officers and myself were the recipients of many courtesies of a more social nature from the Swedish officers, and from our military attaché, Captain Colvin. Captain Colvin was also officially most attentive, and did everything to help us during our stay at Stockholm.

Upon the conclusion of the riding the American contingent sailed that night upon the "*Finland*" for Dover, where the "*Finland*" discharged their passengers to return on various ships. The horses were shipped to London to be forwarded by the Atlantic Transport Steamer "*Minnewaska*," Lieutenant Graham accompanying them.

The thanks of the War Department are due to Colonel Thompson and the American Olympic Committee for furnishing transportation for our grooms and horses from New York to Stockholm and return. The accommodations they furnished both ways were excellent in every respect, and they met all the incidental expenses of the transfer through England and the necessary delay of six days in London. Thanks are further due to Colonel Thompson for his personal courtesy and kindness to members of the team on the trip over, and during our stay in Stockholm.

Finally, to Captain Henry, the leader of the riding team is due especial acknowledgment of the War Department of the masterly way in which he trained his team, and for his perfect management of it during the actual contest, which resulted in so satisfactory a record, considering the odds against us.

SOME CAVALRY NEEDS.*

BY CAPTAIN ROGER S. FITCH, SECOND CAVALRY.

AMONG the various needs of our cavalry the following are considered of prime importance:

(a) Minor changes in organization. The revival of double rank principles for mounted action. War strength all the time. One list for promotion.

(b) More practical and uniform training. A specially selected "Cavalry Board" to conduct inspections of all cavalry regiments.

(c) Such minor changes in law and regulations as will tend to encourage regimental and corps esprit.

(d) Arms, equipments and methods to be especially adapted to cavalry purposes.

(e) A "Mounted Service Badge" for award to cavalry soldiers who excel in mounted work.

(f) More rational course of pistol practice.

(g) More thorough training in the use of the saber.

(h) Thorough training in patrolling and scouting.

(i) The adoption of a system of "Maneuver Flags" in order to make small maneuvers more interesting and profitable.

(j) Further encouragement of excellence in horsemanship and horse training.

(k) An annual "Cavalry Meet" for the encouragement of superior cavalry work of all kinds and for the promotion of *esprit de corps*.

ORGANIZATION.

Our present organization is universally acknowledged to be unsurpassed for dismounted action. And the revival of the principles of double rank for certain classes of mounted work

*This article was written after the passage of the 1912-13 Army Bill but too late for publication in the September, 1912, number of the CAVALRY JOURNAL.

would, it is believed, render it equally superior for mounted action.

Our division of the regiment into twelve troops has in countless engagements won the approving stamp of time and war. In revolutionary times the American cavalry was necessarily organized upon European models but as time went on there was slowly developed an organization peculiarly our own. And for the last hundred years the number of troops per regiment has always (except for the years 1814-15) been either ten or twelve, the latter being the number authorized by law ever since 1862. As European cavalry regiments consist of but four five or six squadrons, practically corresponding to our "troops," it will be seen that our present twelve troop organization must be considered distinctively American.

Our organization of the troops into three squadrons, corresponding to the infantry battalions, is, however, of comparatively recent date. From the time that the old First Dragoons (now the First Cavalry) was organized in 1833, up to and including practically the entire Civil War, our cavalry regiments were habitually handled in squadrons of two troops each, the squadron being ordinarily commanded by the senior of the two troop commanders. All mounted formations were habitually in double rank.

Without increasing the number of cavalry officers or the rank of a single one, the same formation into (temporary) two troop squadrons could easily be made use of in war. Foreign nations habitually use single squadrons for "advanced," "reconnoitering" or "contact" work. For similar work in war with such countries we should find one of our troops a little too small and one of our squadrons a great deal too large. A two-troop squadron would "split the difference" and be a suitable command for such work.

Moreover, two troops, each in double rank and both accustomed to working together, would make an ideal tactical unit for mounted action. Frequent drills and combat exercises in double rank, both in two and four troop squadrons, would make the troops easy to handle in either. In war a regimental commander could at will use his regiment as a three, four, five or six squadron organization, its division into more than the ordinary

three squadron depending upon the colonel's knowledge of his officers and troops and upon the requirements of the moment.

It must not be forgotten in this connection that the double rank formation for mounted work is the kind that the American cavalry used in the various great wars prior to 1898. It is therefore far from being a modern European theory seeking transplanting to American soil. It was not until 1861, upon the official adoption of "Cooke's Tactics" by the War Department, that a single rank formation was prescribed for our cavalry. But, although these "tactics" contained the usual preface to the effect that all movements and exercises not prescribed therein were strictly forbidden, the double rank formation continued to be used throughout practically the entire Civil War. If our cavalry, throughout the war that includes the best fought cavalry battles of modern times, found the double rank formation superior for mounted action, and if modern European cavalry has always found it so, there must be a "reason for it." We had better, by thorough trial, determine whether that reason does not exist for us today.

During the last century the strength of our cavalry troops has varied from a legislative minimum of 61 to a legislative maximum of 116. It is worthy of remark that, while just prior to the War of 1812 the strength per troop was but 76 men, this number was raised to 91 early in 1812 and to 116 before the war was over.

The outbreak of the Civil War found our authorized strength 76 men per troop. This was at once raised to 92. The next year, 1862, it was raised to 100, and the legislative maximum has remained at that figure ever since.

Experience shows that the necessary increase in numbers per troop at the outbreak of war has invariably resulted in decreased efficiency at the very time that the highest efficiency was needed. A small number of men per troop results in heavy "overhead cost." We should have 100 men and horses per troop for war. And our peace strength must be at least as great as our war strength, and preferably slightly greater. Sudden expansion at the outbreak of war may answer in some branches, but is absolutely ruinous to the efficiency of cavalry.

That reservists will eventually be available does not alter this fact.

In considering the proper strength of United States cavalry, it should be remembered that all great military leaders and the most eminent military authorities are agreed that the proper proportion of cavalry to infantry is at least one to six; also that it takes many months of hard work, constant training and strict discipline to make efficient infantry, longer yet to make good artillery and still longer, by very many months, to make cavalry that is fitted for the varied work that will fall to its lot in war.

Although the proportionate peace strength of our regular cavalry to our regular infantry is practically one to two, it must not be forgotten that these proportions will be greatly changed on the outbreak of war, when, by law, the National Guard becomes part of the "First Line." There are over 100,000 completely equipped National Guard infantry and only about 4,000 National Guard cavalry, of which less than one-fourth are mounted. The rest have to hire untrained horses when they are called out for maneuvers or otherwise. As for cavalry operations, thoroughly trained horses are as essential as trained men, it can readily be seen that the regular cavalry must fight its first battles practically alone. Furthermore, cavalry, to be thoroughly efficient, must be cavalry all the while, and not mounted for but a week or two each year. The existence of several exceptionally fine National Guard squadrons that own and train their own mounts serves only to prove the rule.

It is to be hoped that before long the "one list for promotion" will be adopted for the three combat branches of the service. The sooner this is done the better for each branch, the army and the country. United effort then will enable the army to obtain what the army needs—and all the things it needs—whether changes in cavalry organizations, larger infantry regiments or more field and horse artillery. In the meantime any changes in cavalry organization or numbers should be sought with increased efficiency and reasonable economy as the sole factor to be considered. The probable, or possible, effect on cavalry promotion should be allowed no

weight whatever. And especially should we avoid even the appearance of combining promotion plans with reorganization.

TRAINING.

Even with the present distribution of cavalry posts, division or department commanders could in many cases easily arrange to have cavalry maneuvers that, with practically no expense to the government, would afford good practice in the handling of divisional or independent cavalry. It would be easy, for instance, to have the cavalry garrisons of Fort Des Moines and Fort Riley operate against each other, either or both regiments acting as divisional or independent cavalry as desired. At the conclusion of this maneuver, both regiments, reinforced by horse artillery from Fort Riley, could be handled as a brigade of independent cavalry against troops from Fort Leavenworth, Sill or other points, or against merely outlined or represented forces. The cavalry from Meade and Robinson, from Sam Houston and Clark, from Bliss and Huachuca (and Apache) might operate similarly. Eventually, when most of the cavalry is stationed in the southwest, combined cavalry maneuvers and training on a broad scale can be held even more conveniently and cheaply.

At least every two years there should be some "independent cavalry" maneuvers with a brigade on each side, accompanied by some horse artillery, mounted engineers, signal troops, aeroplanes, supply trains, etc. These brigades should start from points at least a couple of hundred miles apart. A (small) army headquarters should be assumed for each side, to receive all reports that would naturally be sent back in actual war. This would serve to illustrate the relation that the cavalry, even when independent, must bear to the rest of the army, and would impress upon all the vital necessity, not only of obtaining information, but of getting it back in time to be of use. Furthermore, the practice in strategic patrolling, in transmitting information, in making and combining sketches for use of troops in rear, in reconnaissance and scouting expedients and in trying out the best methods of marching and supplying an independent cavalry brigade would be invaluable. Later as the forces came nearer together, practice would be

had in the tactical handling of cavalry brigades, in combination with horse artillery, against forces of approximately the same strength and composition. Finally, after the tactical decision had been reached, the two brigades should be combined to form a cavalry division for operations against an imaginary or represented enemy.

In all large combined maneuvers, as well as in the purely cavalry maneuvers just described, it should be the rule rather than the exception that the opposing forces should commence operations a number of marches apart, this in order to give other than cavalry commanders an opportunity to appreciate how their cavalry must be handled in war in order to get results.

It seems almost needless to say that the "Reds" and the "Blues" should, in large maneuvers, have entirely separate and distinct lines of supply. The advance depots, supply columns and communications should never be declared neutral or non-capturable. If so, one of the chief lessons of such maneuvers, the proper establishment and protection of the line of supply, is lost.

Of course captured supplies should not actually be destroyed, wagons run off or bridges blown up, for there is no object in wasting property or supplies, nor in making troops unnecessarily suffer even inconvenience. But the probable effect of the capture of supplies, or a similar interruption of the line of communication, should be given full weight by the umpires; and the commander of the side whose system of supply has been thus interfered with must be compelled to limit himself to such movements as would actually be feasible for him to undertake had the destruction or interruption been actual instead of simulated.

In no maneuvers should umpires give credit for trenches claimed to have been dug for bridges claimed to have been blown up, unless sufficient intrenching tools in the one case, and explosives in the other, were actually available, together with sufficient men to do the work and sufficient time in which to do it. Whenever practicable, trenches should actually be dug. If this be impracticable, their assumed location and extent must at least be accurately marked by stakes, stones, small flags or otherwise.

Before the conclusion of any large cavalry or combined maneuvers, the senior cavalry field officers should be given opportunities to demonstrate their fitness for higher (cavalry) command. Those who signally fail should have the fact noted on their records. And if at subsequent maneuvers the same officers again fail to handle their troops reasonably well, they should be sent before a permanent "Cavalry Board," consisting of three members, either general officers who have been promoted from the cavalry or other cavalrymen of high rank and proven ability. This board should make a number of entirely practical tests of the officer's tactical judgment and of his ability to handle troops. Upon an adverse report, the officer should be sent before a retiring board. If practicable the "Cavalry Board" should attend, as observers, all large cavalry and combined maneuvers. Practical tests could then be made immediately upon the conclusion of the maneuver; inefficient officers could then be more speedily sent before a retiring board or detailed on duty where they could do no harm in time of war.

With one or more large cavalry maneuvers every other year, and with more or less practice as divisional cavalry every year, the higher cavalry officers would occasionally have the desired opportunities to handle large bodies of mounted troops under service conditions. After all, large maneuvers are mainly for the practice they afford the higher commanders, their staffs and the service of supply. Troop commanders and their men, aside from being helped to obtain a proper perspective and a realization of the necessity for entire co-operation between all branches of the service, can get more real instruction to the square inch by taking part in small maneuvers at their posts.

In garrison training, each colonel, major and captain should, so far as practicable, be permitted by higher authority, to get results in his own way. The principle of "Hands Off" all details properly belonging to the provinces of subordinates should be more strictly observed. The necessary uniformity of training should be secured by frequent and varied inspections rather than by issuing detailed orders. Results, not methods, are what should count.

Uniformity of cavalry training throughout the service can only be attained by inspections of all regiments by the same board. This should be the main work of the permanent "Cavalry Board" which should annually test by means of field combat and scouting exercises, each regiments' preparedness for war. An oral critique should be delivered on the ground at the conclusion of each exercise. The relative excellence of regiments in such exercises, as well as in horsemanship, saber practice and target practice should be published annually in orders, as is now customary with respect to target practice alone. The board should arrange its itinerary so as to inspect each regiment at an approximately uniform length of time after the receipt of its semi-annual consignment of recruits. This would enable comparisons to be based on a uniform standard.

The present annual inspection of posts can be made by almost any officer of suitable rank. Civilian accountants can inspect money accounts.

All National Guard cavalry organizations should be inspected by a sub-board selected by the "Cavalry Board." Their relative excellence should also be published in orders. The present position of "Inspector-Instructor" should be abolished. The officers on duty with the National Guard should be "Instructors" only.

CHANGES IN LAW AND REGULATIONS.

The present method of sending recruits to a regiment but twice a year is a great improvement upon the old method of sending them in dribblets, and will enable the training of the troops to be made much more uniform. Whether the principle could not eventually be extended so that each regiment would receive recruits but once a year is worth considering. Cavalry recruits should be given some instruction in riding before being forwarded to regiments or else the dates on which they are forwarded should be changed so that no regiment will receive recruits during or immediately previous to the annual maneuver period.

An enlistment period including but three years with the colors and four in the reserve would make recruiting easier and

give us an adequate reserve sooner, besides, most important of all, giving us nearly twice as many reservists as will the present system. Reservists should be paid a small amount quarterly; this would keep their addresses on file and up to date, both important considerations. Reservists should be liable for ten days' service on full pay every other year. They should be entitled to free medical service at any army hospital at any time.

If practicable, enlisted men on duty with the colors should be paid every week. This would make pay day less of an event and would be conducive to contentment and discipline.

Such "Quartermaster Corps" men as would accompany a regiment in the field, namely, the field train teamsters and packers, should be enlisted, discharged and paid through the regiment, and all field trains should be kept completely organized and equipped in time of peace. In time of peace there should be one, or preferably two pack trains attached to each regiment.

Soldiers not on duty should be permitted to leave the post at any time. Eleven o'clock inspection and reveille roll call should be abolished. The wearing of civilian clothes outside the post should be encouraged; in fact, it would be an excellent thing if none but the best soldiers were permitted to wear uniform outside reservation limits. If this were the case, the general public would more quickly come to give the army uniform the respect that it merits.

Hunting, shooting, camping trips, etc., should be encouraged in every way. Big game hunting in particular, on account of the knowledge of country, ability to attack and qualities of hardihood and self reliance that it develops, is the best sort of preliminary training for scouting work. Post and regimental commanders should be authorized to grant hunting leaves (either to men or officers) for periods not exceeding thirty days, instead of ten as at present.

Garrison prisoners should not be paraded with general prisoners, or at all. A man serving a short sentence for a comparatively slight offense, should invariably be paroled, unless there are special reasons for believing that he is likely to break

such parole. Better an occasional escape than the present too frequent sight of a sentinel over every prisoner.

First sergeants should be entitled to salutes from the men of their respective troops. The first sergeant is generally a high class type of man, and, by making him entitled to a salute, higher authority would show its appreciation of his responsible position.

It is thoroughly believed that the time-honored term "trooper" should be revived as the official designation of the cavalryman. Designating a cavalry trooper as "private" is a change of comparatively recent date. There was at least one volunteer cavalry regiment in '98 in which the men were not only called "troopers" but were enlisted and discharged under that title; and it had a most excellent effect on regimental and cavalry *esprit*.

With a colonial army in reality, if not in name, there seems no longer to be any objection to the long hoped for localization of regiments. Among its many attendant advantages will be the fostering of local interest and regimental feeling. An easy method of furthering such feeling would be to permit slight but distinctive additions or changes to be made in the full dress (and possibly in the dress) uniform in the different regiments; such changes to be recommended by a board of regimental officers and approved by the colonel, the "Cavalry Board" and the War Department.

Another thing with reference to uniforms—no article of uniform should be adopted for the service at large merely because it has been found peculiarly well adapted to the needs of one branch. A case in point is the adoption of a sweater for field service of mounted troops merely because a sweater was considered desirable for foot troops. If, for instance, a long overcoat is adapted to the cavalryman's needs and a pea-jacket to the infantryman's, better let each wear what is suited to his special needs and not try to make long pea-jackets or short overcoats do for both. The difference in cost is usually trifling; the difference in comfort is often great.

ARMS, EQUIPMENT AND METHODS.

There has been some talk lately about the possibility of intrenching too's being issued to the cavalry. It is believed that this would be a serious mistake. There is already too much tendency in our service to dismount prematurely, and, given intrenching tools, we would not only be encouraged in this tendency but would earn to stay dismounted indefinitely. the comparatively few occasions when intrenching tools might be helpful would not make up for their weight and the trouble of packing them along through many marches.

Similarly with the knife bayonet. If some sort of bayonet is considered a necessary part of the trooper's armament, at least let it be a rod bayonet that can be left in its socket alongside the barrel. Any belief that the cavalry should be provided with the knife bayonet, or any bayonet, is doubtless due to the fact that the cavalry of certain foreign nations have considered adopting them and in one or two cases have done so. But the American cavalry soldier still has his pistol, and so long as he is permitted to retain that valuable weapon it is believed he is much better off without the bayonet than with it.

That the rifle or carbine furnished the cavalry should be the same caliber as the infantry rifle goes without saying, but details as to the rifle's weight, length and attachments should depend upon the use to which it is to be put. As a weapon for dismounted troops the present model Springfield is universally conceded to be one of the best. It is not, however, equally satisfactory for cavalry purposes. A lighter rifle, with shorter barrel would be just as effective in battle, or even in target practice at unknown ranges. It is only at known distance target shooting that the present infantry rifle is superior to a good carbine, and known distance shooting is not the kind we find in war. The present sights, both front and rear, are too frail to stand joggling about in a gun boot. Raised metal projections by the side of the sights would probably remedy this difficulty, at any rate so far as the front sight is concerned. But if the faults of the present rifle, in so far as regards its use as a cavalry weapon, cannot be corrected, a new rifle for cavalry, use should be adopted, after thorough trial *in the cavalry*.

As regards the proposal of some time ago to do away with the pistol in the American cavalry, it is hoped and believed that the day of its discard is still in the far distant future. Its value in the hands of men who know how to use it is beyond dispute. For scouting and patrol work in close country, for emergency work of all kinds and for self defence in savage countries the .45 caliber Colt revolver has shown itself invaluable. And the new automatic promises to be even better.

Our saber should be better adapted for cutting blows—the kind of blows the Anglo-Saxon will instinctively use in a *mêlée*, no matter how well he may have been trained in thrusts and points. It should of course be issued already sharpened. It takes much time and elbow grease to sharpen a blunt saber and the operation, if unskillfully done, is apt to draw the temper of the blade.

That all three arms, the carbine, saber and pistol, are necessary to the American cavalryman's equipment, but few will deny. But we need to proportion differently the time devoted to training in the use of each, and to change somewhat our methods of instruction. So far as the daily drill and the "Drill Regulations" are concerned, it is obviously useless to make any change until the organization and formation (whether single or double rank, or both) shall have been definitely decided upon.

At present we not only use exactly the same rifle as the infantry, but we shoot the same course. To set aside several consecutive months of each year for the practice of one kind of training is plainly poor preparation for the all around work that a cavalryman has to know how to do. The target season should be twelve months long, not three. It should extend from January 1st to December 31st, and be coincident with the horse training season, the reconnaissance season and the saber season. In other words, efforts should be made to have some shooting, some saber work, some horse training, some scouting, some small maneuvers, practically every month in the year. The scores made on the range might not be quite so high but the cavalry would be more efficient.

At the proposed annual "Cavalry Meet" one of the events should be a rifle competition open to cavalrymen alone, who

should then not be encouraged to attend department, division or army rifle competitions. Such competitions take the best shots away from their regiments for too large a proportion of every year and result in making rifle shooting loom too largely on the cavalryman's horizon. Scouting and reconnaissance—one of the arm's chief duties—is, at present, relegated to a back seat, and training for mounted combat is not given the attention that its importance deserves. Success in marksmanship is recognized by a generous bestowal of badges and in most cases by increased pay; but the bold rider, the skillful swordsman, or the best of scouts gains nothing but the consciousness of duty well performed.

MOUNTED SERVICE BADGE.

In order to encourage excellence in individual mounted work and in order to give every soldier ocular evidence that such excellence is considered of high importance, a "Mounted Service Badge" should be adopted. This badge should be awarded to every cavalry soldier (or officer) who shows himself to be exceptionally proficient in horsemanship and horse training, scouting, mounted fencing and riding at heads, or in mounted pistol shooting. The badge itself, should be inscribed simply "Mounted Service," the reason for its reward appearing only on the one or more bars attached to it. These bars should be inscribed "Scout," "Expert Horseman," "Saber Expert" or "Pistol Expert," as the case may be.

Qualification in scouting, horsemanship or saber work should be determined by the "Cavalry Board" during its annual inspection visit to cavalry posts. Their tests ought to be frequently changed so as to obviate all tendency toward one sided development in these important branches of work. The course in pistol practice to be prescribed, as at present, in Firing Regulations.

Qualification as saber or pistol expert to continue for three years from date of qualification, that in horsemanship or scouting, once gained, to remain continuous.

PROPOSED PISTOL PRACTICE.

The aim of our pistol practice should be to teach each man to use his weapon quickly and effectively, especially when

mounted. Slow fire practice on a bull's eye target should be limited to the amount necessary to acquaint the soldier with his weapon and how it shoots in his hands.

No firing at distances over twenty-five yards should be required in the regular course. First, therefore, in Dismounted Course (Instruction Practice) should come slow fire at ten, fifteen and twenty-five yards. The "A" target with its larger bull's eye, and maximum count of five, should be substituted for the "N" target. The latter places too high a premium on absolute accuracy and thereby encourages dwelling on the aim. Fire a minimum of two scores, slow fire, at each range.

Follow this with rapid fire at a single disappearing "Q" target (silhouette of the man standing) on the "A" frame. Mark the silhouette with an oval shaped ring about 12x24 inches, with the longer axis vertical and its lower extremity four or five inches above the crotch of the silhouette. This oval would include the abdomen, "the place where a man lives" and the best point at which to aim in time of real trouble. Giving the maximum count (5) for a shot placed within this oval would train the soldier to shoot there instinctively in a fight. Two larger oval rings spaced about eight inches apart would include the four and three spaces. Hits outside the three oval, but within the frame, to count two, (see Figure 1). If thought preferable, the target might be marked as shown in Figure 2.

Ranges ten, fifteen and twenty-five yards. Pistol to remain in holster until target appears or until command "Commence Firing." Fire seven shots with automatic pistol (or five with revolver) in ten seconds. Minimum of two scores (Instruction Practice) each range.

The remainder of the instruction practice, dismounted, should be devoted to firing on a number of similar disappearing targets arranged at various distances and directions from the firing point. For this purpose a special pistol range should be prepared at each cavalry post. This proposed range will accommodate eleven disappearing "Q" targets on "A" frames, but not more than seven (or five, if revolvers are used) will be in use at any time. Firing over this range is divided into two general courses, X and Y. The seven targets connected by

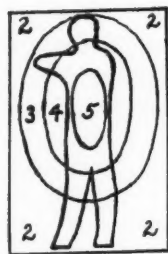


Fig. 1.

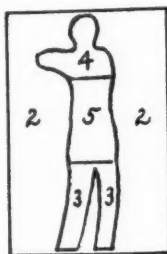


Fig. 2.

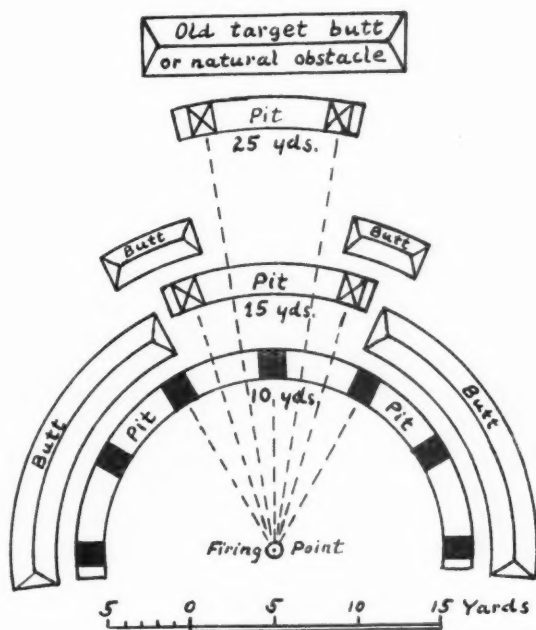


Fig. 3

dotted lines with the firing point (see Figure 3) are those used in course X. The seven "ten-yard targets" (shown in black) are used in course "Y."

The X targets are especially adapted for practice in rapid fire at a number of disappearing targets at *varying ranges*; the Y targets for close-range rapid fire practice in *very different directions*.

The instruction firing on this range should be conducted as follows:

First fire two scores at the X targets, all of which are to be raised at the same moment and kept up for, say twelve seconds. Then fire two scores at X targets which appear one after another but at "unknown" distances. For the first score at unknown distances, the first target is raised at the command "Commence Firing." As soon as it is fired upon, another is raised and so on, the order in which they are raised being frequently changed by the officer in charge; the last shot being fired before the expiration of, say, twenty seconds. The second score should be as follows: A target previously designated as No. 1 is raised at the command "Commence Firing," the instructor then, in a loud tone, calls out in succession and at intervals of two seconds "Two," "Three," "Four," "Five," "Six," "Seven." The targets to be raised as quickly as their respective numbers (previously assigned) are called. As soon as each target reaches its full height it is at once lowered. "Cease Firing" is given as the last target disappears from view. The numbers of the different targets to be changed between every two scores so that the man firing will not know the sequence in which the targets are to appear.

Four scores are then fired on targets Y in the same manner and by the same commands as in the firing on the X targets.

This completes the Dismounted Course, Instruction Practice. Further practice with increased or decreased time allowance, if thought desirable by the officer in charge, should then be given to the poorer shots, an effort being made to develop in each man confidence in his ability to "drop" within a very few seconds any man, or small party of men, suddenly appearing within short pistol range. This will be of infinitely more value to the individual's self-reliance and to the organiza-

tion's efficiency than will the ability to make bull's eyes at fifty yards on a single stationary target while using slow or "timed" fire. The proposed methods of practice will also help to prepare the men for the more difficult mounted firing.

Dismounted Course (Record Practice) should consist of:

(a) Target "A," two scores at fifteen and two at twenty-five yards. Time ten seconds each score.

(b) Target "Q" on "A" frame, two scores at fifteen and two at twenty-five yards. Time ten seconds each score.

(c) Course X. Seven "Q" targets on "A" frames. *Unknown ranges*. Two scores. Time based on allowance of two seconds each shot.

(d) Course Y. Seven "Q" targets on "A" frames. *Unknown angles*. Two scores at ten yards. Time based on allowance of two seconds for each shot.

With reference to the Mounted Course (Instruction Practice) the following might well be added to the present course: A minimum of two scores in which the firing should be done on the same targets, over the same range and under the same conditions, as given under (C) above, the only difference being that in this case the man firing is mounted. In this mounted firing, however, on the X targets, the hits are scored as in the rest of the mounted practice, *i. e.*, hits on the upper part of the figure count two, on the lower part one. This mounted practice at disappearing targets is suggested, because often in war individual mounted soldiers and scouts have occasion to use mounted pistol fire when at a walk or halted.

In mounted instruction practice each man should be given some opportunity to practice firing at a mounted and moving adversary. A scheme of using wax bullets, plastrons, etc., similar to the course outlined in a CAVALRY JOURNAL article of a year or two ago, should be adopted. If impracticable to use wax bullets in the automatic pistol, revolvers should be used for this practice, which should be purely for instruction purposes.

Each soldier to shoot through the mounted instruction practice at least once on his own horse. Additional instruction may be held on any troop horse.

The Mounted Course (Record Practice) to be the same as the minimum prescribed for the Mounted Course, Instruction Practice, except that no firing with wax bullets will be required, All mounted record firing to be done on the steadiest horses.

In case revolvers instead of automatic pistols are used in firing, five shots should of course constitute a score and no more than five targets should be used in any one score. In all firing on X targets with the revolver, the two targets omitted will be one of the ten yard targets and one of the twenty-five.

In all cases of fire at either X or Y targets only one shot is allowed at each target. If more than one hit is found on a target the hit with the lowest value is the only one counted.

There should be at least four, 22 caliber automatic pistols (or revolvers on .45 caliber frames) issued each troop for use in instruction practice. Both the dismounted and mounted courses should be fired through these weapons and their inexpensive ammunition at least once before doing any firing with service weapons.

The percentage necessary for qualification as "Expert Pistol Shot" should be determined by experiment. But instead of receiving the present "Expert Revolver Shot" insignia, the successful cavalryman should be awarded the "Mounted Service Badge" with appropriate bar, as already explained.

SABER PRACTICE.

The horse and the saber are, in most regiments, given too little attention in their combined capacity as weapons.

It is freely granted that the fenceless farms of Europe afford more typical "charging ground" for cavalry than does ordinary American terrain. "Charge" in any modern war is apt to be a less familiar sound than "To Fight on Foot." Nevertheless we should do everything in our power to encourage the growth of the spirit that leads its possessor to fight mounted if he can, dismounted if he *must*. Our present training is too conducive to making us mounted infantry, nothing more.

Saber practice primarily lacks the interest which competition supplies to the rifle and pistol work. If we could supply this, it would be a tremendous help in placing mounted combat where it deserves to be in every cavalryman's thoughts.

There should be, per troop, fully thirty sets of fencing equipments. The fencing sabers should have blunt, round edged, soft iron blades and should approximate the service saber in weight, length and balance. The wooden blades still used in our service are too light, too poorly balanced and too easily broken. The plastrons and masks, in order to be suited for mounted fencing, should afford all-around protection. A left hand glove should be added to the equipment.

Fencing contests (mounted) should be held between the various squads, troops and squadrons. In addition to the ordinary (instruction) practice of running at heads and taking off rings, a "Record Run," including a few jumps and to be taken at full gallop, should be established, a certain value to be given to each successful cut or point. Every man who attains a sufficiently high percentage at this work should be afforded an opportunity to demonstrate his proficiency as a mounted fencer in the saber contest held before the "Cavalry Board" during its annual inspection.

SCOUTING AND RECONNAISSANCE.

Training in the duties of divisional cavalry should be held regimentally, and squadron commanders should train their commands for duty as contact squadrons or as individual contact troops. Troop commanders would then feel amply repaid for spending more time in solving practical problems in reconnaissance and in devoting plenty of time to training their men in individual scouting and trailing. The men's interest in this sort of work does not have to be created; it is dormant in every outdoor man. But he needs thorough training and constant practice before he reaches the point where he will almost instinctively notice the different objects, movements or tracks visible from his line of march and be able to draw reasonable deductions from such as might affect his future course of action. Not only may his individual safety, or that of the patrol, depend upon such ability, but he may be enabled, through superior skill in "reading sign," to get on the track of information of utmost value to his superiors.

Troop tests of individual proficiency in scouting could easily be arranged, the most proficient officers and men to later enter in similar squadron and regimental tests—only a

certain limited number of the best scouts to take the "Cavalry Board" tests.

Preliminary instruction in scouting would naturally include teaching a man to find his way by day or by night across strange country; first, with the aid of a map and compass, then by map or compass alone and finally without either. This work should include practice in marching to some certain distant point in unfamiliar country, the route taken to be optional with the patrol leader. In addition, practice should be had in following a certain designated but unfamiliar route to some distant point. At first the scout might be given written instructions as to his route but later on verbal directions should be sufficient. More practice should be given in rapid road-sketching, and later in sketching roughly a route from memory alone, and in describing it so a person unfamiliar with the country could follow it without difficulty. The principles of the advance *bonds successifs* should be thoroughly taught.

Further scouting exercises, the simpler the better, can be made up and carried out without duplicating. An old problem becomes a new one when worked out on new ground or when used with new men. One exercise might include the trailing of one patrol or scout by another; a second, the advance of one or more patrols, or scouts, in opposite directions along the same general route, each party endeavoring to see the other without being seen, and yet being obliged to reach a prescribed destination within a limited time. Other exercises would include endeavoring to learn the strength of a column on the march; the extent of a defensive position and the whereabouts of the enemy's reserves; the front covered by an outpost line, the points most easily approached under cover, the position of the supports and reserves and that of the main body.

PROPOSED MANEUVER FLAGS.

A troop commander could easily conduct profitable scouting exercises and small maneuvers with his own troop by the use of "Maneuver Flags" to represent additional forces where necessary. The body color of the flag, should in all two-sided maneuvers, be blue for the "Blues" and red for the "Reds." The arm of the service could be shown by edging or

bands, and the size of the organization represented by the size or shape of the flag. The following "maneuver" (or "troop") flags are suggested for distribution to each regiment of cavalry (and infantry if desired):

Number of flags.

BLUE INFANTRY.

- 8 Section —blue flag, 2' on lance by 2' fly.
 4 Company—blue flag, 2' on lance by 3' fly with broad white horizontal stripe.
 3 Bn. Hq. — blue flag, 3'x4'.
 1 Reg. Hq. —blue flag, 3'x4', with broad white horizontal stripe.
 16

RED INFANTRY.

Same as above, substituting red for blue.

Number of flags.

BLUE CAVALRY.

- 8 Platoon —blue flag, 2'x2', edged with yellow.
 4 Troop —blue guidon, regulation size, with broad yellow horizontal stripe.
 3 Squadron Hq.—blue flag, 3'x4', edged with yellow.
 1 Reg Hq. —blue flag, 3'x4', with broad yellow horizontal stripe.
 16

RED CAVALRY.

Same as above substituting red for blue.

Number of flags.

BLUE ARTILLERY.

- 3 Battery —blue guidon, regulation size with broad red horizontal stripes.
 2 Btn. Hq.—blue flag, 3'x4', edged with red.
 1 Reg. Hq.—blue flag, 3'x4', with broad red horizontal stripe.
 6

RED ARTILLERY.

Same as above, substituting red for blue *and* blue for red.

Thirty-eight of these blue "troop flags" and thirty-eight of the red, as above described, would probably be enough for each regiment, especially as by giving increased value to the flags, forces of almost any strength could be represented. At least thirty white "trench flags" a foot square, should be also furnished in order to indicate the position of trenches assumed to have been dug.

All these flags should be regimental property and detached squadrons should be entitled to take their share with them.

The following proposed general principles ought to be observed in the use of "Maneuver Flags.:"

1. In case a column of troops on the march is to be represented by flags, the ordinary road spaces should be approximately observed. Otherwise in close country, a road on which such flags were not at least approximately spaced might appear "empty" of troops.

2. Flags representing troops in camp should be planted at proper intervals and as conspicuously as possible.

3. When used to represent troops in a defensive position or on outpost, or in any other case where the real strength of the command could be learned only by an attack, the flags should not be prominently displayed until such time as the troops would have to disclose their position by fire or otherwise. They should, however, be placed so as to be visible to any patrol or scout that might work around to the flank or rear.

4. Flags indicating supports, reserves, etc., should be at the points where such forces would naturally have been held. In all cases where the troops themselves would have been concealed from view in some directions, but visible from others, efforts should be made to display the flags accordingly.

5. In placing trench flags, they should be prominently displayed if the actual trench would necessarily have been conspicuous, and less plainly displayed if the trench could have been more or less concealed. In any event, the ends of each trench should be plainly marked by a trench flag or otherwise.

Ordinarily the best results would, it is believed, be obtained by actual troops on picket and outguard duty or on the actual firing line, "Maneuver Flags" being used only to repre-

sent supports, reserves, the main body or approaching reinforcements. But either or both sides could if desired, be represented almost wholly by flags, using the majority of the men for patrol, scouting or combat purposes.*

HORSEMANSHIP AND HORSE TRAINING.

Within the last few years, largely due to the influence of the Mounted Service Schools, a more thorough training of the cavalry horse has come to be recognized as one of the most important duties of the cavalryman.

Competitions in riding and horse training should occasionally be held in each troop, squadron and regiment. The best riders and trainers should then be selected for further test, and possible qualification, by the "Cavalry Board." But no man should be entitled to his "Horsemanship" bar who can not show his ability to take an average troop horse on a ride of say 150 miles in seventy-two hours, taking entire care of the animal during this time and subjecting him to examination by the veterinarian at the end of each day's ride.

It is to be regretted that Congress has withdrawn its official support of polo as a game for enlisted men. Though well called the "Sport of Kings," it is also, as a British general once said, the best game on earth for a cavalryman for "it teaches him to think straight while riding like hell."

In all work with horses, however, we are hampered by an entire lack of riding halls at many cavalry posts and by inadequate hall room at posts fortunate enough to possess any. At northern stations well built halls are a vital necessity, and even

*It ought, I think, to be stated that the idea of using colored flags to represent certain troops in maneuvers is not entirely original, having been suggested by seeing how much three or four small blue signal flags (each assumed to represent a Blue infantry section) and a couple of similar red flags (each assumed to represent a Blue company) added to the realism, interest and success of a small cavalry maneuver which I witnessed at a Dutch cavalry post in Java early this year.

Aided by these flags a couple of dozen cavalymen successfully represented a three-mile long infantry outpost line which was reconnoitered, and later turned, by a red force consisting of the rest of the squadron, about sixty men. The entire maneuver took less than three hours but illustrated many valuable points, including the action of tactical patrols, selections of an extended outpost position, etc., etc., without the flags the maneuver would have been impossible.

in the southwest, the region par excellence for the training of cavalry, they are needed as a protection from the prevailing high winds. There should be at least two halls at each regimental post, or preferably one for each squadron.

PROPOSED CAVALRY MEET.

An Annual Cavalry Meet is decidedly necessary in order to promote a healthy rivalry between regiments in something else than target practice and polo as well as to encourage the spread of uniform and effective methods of instruction in reconnaissance and individual cavalry training.

The program should include practical tests in:

- (a) Horse training and Riding, including a long distance ride under service conditions.
- (b) Patrolling and individual Scouting, as well as competitions in
- (c) Rifle Practice.
- (d) Mounted Fencing and Running at Heads.
- (e) Mounted Pistol Practice.

The "Cavalry Board" should be in charge of the meet and should name the judges, referees, etc., selecting only such officers as are recognized as experts in the various kinds of work.

Each year the Cavalry Meet should be held at a different place, *e. g.*, San Antonio, Fort Riley or Kansas City, and should last not to exceed two to three weeks. No competitor would then be necessarily absent from his regiment more than a month or so at most.

The contestants who do the best work should be given suitably inscribed gold, silver or bronze medals similar to those now awarded only at rifle and revolver competitions.

Only such officers and men as have previously won the Mounted Service Badge, or insignia given for excellence in post target practice, should be eligible to attend the meet as competitors, and each competitor should be limited to events in which he has already won a badge or bar at his post.

Names of all successful competitors should be published in orders as is now done only with respect to rifle and revolver competitions.

Not more, than say, two officers and twelve enlisted men from each regiment should be allowed to enter any one event officers and men competing separately.

In order to keep expenses down, no mileage should be paid any contestant. A couple of tourist cars and one or two stock cars could be made to carry the represenatives of each regiment.

A cavalry polo tournament should, if practicable, be included in the program, the possession of a suitable cup or other trophy to be contested for each year. One or more steeplechases and cross-country runs, open only to officers on horses owned by officers, should also be held, and suitable prizes awarded.



A VISIT TO THE THIRTEENTH DIVISION. JAPANESE ARMY.

BY FIRST LIEUTENANT CHARLES BURNETT, FOURTH CAVALRY.

DURING the latter part of the month of August, at the personal invitation of the Division Commander, Lieutenant General Nagaoka, I visited that part of the thirteenth Division, stationed at Takata, in the province of Echigo. My visit was entirely unofficial, yet I was received with a courtesy and cordiality that was most delightful. General Nagaoka, himself is a most interesting character; of the ruling Choshu clan, he distinguished himself during the late war by his services on the General Staff, and, today, is considered the foremost strategist in the service. He is an excellent "mixer," with all and seems admirably qualified for the position of next Minister of War, which his friends confidently predict for him. As there are some things connected with this visit that may be of interest to the service in general, I have ventured to write of what I saw, and, in a few cases, comment thereon. I have not ventured to comment exhaustively upon the many different points that presented themselves, as that would be quite beyond the modest limits of this paper. The organization of the different arms, general course of instruction, system of promotion, etc., therefore, are touched upon but casually.

Takata is an unimportant town, some 180 miles northwest of Tokyo, and about five miles from the Japan Sea. Previous to the Restoration, it was the residence of the daimyo of that district, the walls and most of the feudal castle still remaining; but since that time its importance has greatly decreased until it has become a rather sordid looking country town. Its people, however, showed a commendable spirit of enterprise by donating land for barracks, drill ground, etc., immediately

after the Japanese-Russian War, with the result that about half of the Thirteenth Division is stationed there. Good accommodations for officers in such a town are naturally limited, and they can certainly be forgiven for longing for Tokyo, or hoping that promotion will soon take them away from Takata.



LIEUT. GENERAL NAGAOKA AND MRS. NAGAOKA.

About an hour before my arrival in Takata, my train was boarded by Captain Tsurumi, of the Fifty-eighth Regiment of Infantry, who had been sent by General Nagaoka, to act as my "guide, philosopher and friend," during my stay, and that officer certainly performed his duties most kindly as well as efficiently. At the station, the General's adjutant, Major

Tanaka, was waiting; that night we planned out just what I wanted to see for the following day.

As the Seventeenth Regiment of Cavalry is stationed at Takata, it is but natural that I wended my way in that direction early the next morning. All the officers of the regiment were assembled in the regimental officer's club, and, after meeting them, we proceeded, under charge of the regimental commander, Lieutenant Colonel Nakayama, to the second floor of the stables, where a squad was dressed for fencing. As the fencing and physical training of the cavalry, field artillery and infantry is so similar, and to my mind, so important, I shall reserve it for discussion a little later on. After witnessing the fencing exercises, we walked through one of the stables; a wooden building with asphalt floor. The horses stand on this asphalt when not at drill, not being turned out into a corral as is our custom. Bedding is used but sparingly; in the daytime none at all; for the most part, hay and oats are fed, barley sometimes being substituted for oats. Both hay and oats are raised in the Hokkaido district, and it would be difficult to tell the native timothy hay from our own. The horses are small native-breds, apparently somewhat inferior to those of the regiments stationed in Tokyo, yet quite up to the weight of the riders, and were in most excellent condition. A squad of men were having stables as I passed by; they wear white caps and white stable clothes, curry-comb and brush being quite similar to our own. I was quite struck by the cleanliness of the horses feet, the sandy ground and the asphalt stalls probably assisting in this direction. The shoeing seemed well done, and the frogs were in excellent condition. They use machine-made shoes for the most part, although I saw shoes that had been made by the soldier-blacksmith to remedy various foot malformations. The Capewell horse-shoe nail looked quite familiar. The regimental blacksmith shop is large and well equipped for its purpose.

In front of the stables is a large open space, suitable for bull-ring drill, and well provided with hurdles and figures for saber drill. A squad gave a very creditable bull-ring drill doing especially good work at the gallop, the greater part of the drill being at that gait. The drill in the stable yard con-

cluded with jumping hurdles and cutting at figures, all being very well done indeed. From the stables the squad proceeded to a near-by up and down hill course, which was taken at an extended gallop, the men sitting their horses well.

From the stable to the drill ground is about 5000 meters. The problem for the morning was, that the enemy's cavalry had been reported in the vicinity of the drill ground. An advance guard, very similar to our own was formed, and the regiment proceeded in that direction at a walk, taking the trot when about half-way to the drill ground. Upon arrival at drill ground, the point and main body of the advance guard, were firing dismounted from behind a clump of trees, at a represented enemy, some 1,200 meters distant, the led horses being quite close up. A flank patrol was working its way steadily around, but the regiment proper, preceded by ground scouts, immediately began the charge. The advance guard hastily mounted up, and forming a sort of flank guard for the regiment also charged. I don't know how fast the charge really was, but my horse was running about as fast as he was capable of doing. There were no bolters and the regiment was brought to a halt in good order.

The close order-drill which followed, closely resembled our own and offered no especial points for comment. The dismounting to fight on foot, and the mounting after that formation, was not done quite so fast as we usually do it, but that is perhaps due to their double-rank formation. Their short carbine is carried on the back, not touching the saddle. The lower ring of the gun-sling is attached to the side of the stock for convenience in carrying the gun on the back, and is not used in shooting. The carbine appeared to ride steadily, only a few butts swaying at the increased gaits. The bridle has both curb and snaffle, but the former only appeared to be used during the drill. The soldier wears heavy, clumsy boots, which, however, are soon to be superseded by the shoe and legging. The trumpet was not used. The regimental surgeon, who, by the way, has nothing to do with the post hospital, and the regimental veterinarian were at drill.

The cavalry service is now very much worked up over the fact that it is soon to be armed with the bayonet. A very

bitter controversy has been waged over this subject, apparently very much worse than our own pistol vs. saber discussion. Opinion has been about equally divided on the subject, the bayonet partisans claiming that the showing of the cavalry in the recent war, together with the fact that the mounts are poor and not likely to improve very fast, renders the bayonet a necessity; while the real cavalymen claim that such a course is a reflection upon their arm, and will ruin the morale of the cavalry service. The ayes, however, appear to have it.

THE INFANTRY.

Together with the Division Commander, I went to the barracks of the Fifty-eighth Regiment of Infantry. We were met by the brigade commander and the regimental commander, and proceeded at once to the fencing hall, where several squads of officers and men, dressed in fencing clothes, were waiting to perform. As this subject will be discussed later on, I will only say here, that officers fenced with each other and against the enlisted men as well, and an hour was spent most enjoyably in watching the various combats. From the fencing hall, we passed to the open air gymnasium, where various stunts were performed on the long-horse, horizontal and parallel bars. From the gymnastic exercises, we passed to the recruit drill. All recruits from their entry into the service, until three months have elapsed, must use the "goose-step," in marching; the Division Commander explained that the average Japanese are very poor walkers, having been accustomed to wooden geta from infancy, and the "goose-step" counteracted in a large measure the shuffling step caused by long and constant wearing of the geta. A recruit drill is a recruit drill the world over, and is never particularly interesting; but I was very much struck by the practical knowledge and interest the higher ranking officers took in their work. For example, the Division Commander knew exactly how much time each day was devoted to the different drills; the regimental commander, Colonel Hirano, showed an erring recruit how to do the "goose-step" properly, while officers of various rank took part in the fencing and gymnastic drills.

The present law allows the infantry soldier to be held in the service three years, but for economic reasons, the time is cut to two years. The officers complain that this time is not sufficient to properly train the soldier particularly in field work. The weather being quite warm at this time, the work has been curtailed somewhat, I am told. Reveille is at 4:30 A. M., and work is continued until 12 M., but from that time until 2:00 P. M. the soldier has absolutely nothing to do, except perhaps think of the next session from 2:00 until 5:00 P. M. But when he retires at 9:30 P. M., I imagine he can reflect that he has fairly earned his two and one-half cents.

We had tea in the regimental officer's club, where every day all the officers of the regiment take their lunch; then we rode to the maneuver ground, where Lieutenant Colonel Nakayama, a cavalry officer, in command of a force of infantry and artillery, made an attack over open ground on a represented enemy. Perhaps it may be well to mention here that during the summer months, selected officers from the different arms of the service serve with an arm other than their own.

I was very much interested in this exercise, as I was told the formations, general manner of attack, etc., were similar to those employed in the recent war. To go into the matter at all, it is necessary to state the general situation, which, briefly, was as follows: Lieutenant Colonel Nakayama's command, while marching in two columns, with some 1,500 yards interval, upon arriving in the vicinity of the maneuver ground, receives information that the enemy's partols have been reported some distance the other side of the drill ground, which is about 2,000 meters across. It is rather difficult to describe the execution of the problem, as things were happening very fast, and it is quite a difficult matter to put it down into the proper order.

The action of the advance guard was very similar to our own under such circumstances. The advance guard cavalry (about ten troopers), moved out at a trot, followed in a couple of minutes by the infantry advance guard, at a double time. This deployment was made very rapidly, yet the advance guard commander required the unit commanders to repeat their orders before moving out. The advance guard cavalry sent back such information, that the support and reserve, success-

sively, upon debouching from the narrow road, deployed at a run, followed in turn by the leading infantry element of the main body. Another cavalry messenger came back with more definite news of the enemy, and a few scattering shots were heard at the front. About this time, the artillery commander came galloping up to select an artillery position; the artillery deployed with apparently normal intervals, and went into action in the open about 2,500 yards from the reported position of the enemy. When the battery opened fire it was not more than seventy-five or one hundred yards in rear of the deployed infantry.

The original skirmish line formed by the advance guard, was reinforced by both flanks as fast as the infantry could get up. The other column of the command could be seen on the right, also deployed at least 600 yards, intervening between the flanks of the two lines. The early deployments were made with about one yard interval. Early in the action there was firing on the left flank by a force of the enemy; that flank was slightly refused to meet that attack, and one gun (without limber), was run forward by hand, and fired toward the threatened flank; one company advanced in the direction of the new enemy.

The advance was made by rushes, apparently platoon strong, the men running along in an upright position, generally preceded by non-commissioned officers, who designated places for halting-rushes usually being about fifty yards. The firing line was being constantly fed from the reserve (by squads), as fast as they could get up, filling up the intervals in the skirmish line. In fact the field at this time, gave one the impression of being full of men from the firing line back 500 to 600 yards, without any great amount of order, all seemingly bent on getting to the front as rapidly as possible. This advance was made under artillery fire of the enemy, and supported by its own artillery. The enemy was driven back on the left flank, but the company kept on moving in that direction for protection of the main attack. By the time the enemy's position was approached to within 200 yards, the firing line was very dense. Bayonets were fixed, the men standing at charge bayonets until the assembly was sounded. In the

meantime, the right attacking column had swung around and closed the interval to about 300 yards.

All the officers were then assembled, and listened to a critique by their commanding officer, Lieutenant Colonel Nakayama, who, in general, complimented them upon the excellence of the exercise. General Nagaoka then made the following address, which is translated from the newspaper account of the exercises:

"Friendly relations have long existed between America and Japan. Commodore Perry came to lead Japan on the path of civilization, while at the time of the Russian-Japanese War, Ex-President Roosevelt exerted his influence in the interests of humanity and succeeded in restoring peace between the two nations. I hope that peaceful and friendly relations will be maintained forever with our friendly neighbor, the United States of America, to whom Japan owes so much. At this time of the year, we have no afternoon maneuvers, but today as Lieutenant Burnett is with us, we have had such an exercise. I am much pleased with the successful way in which the exercises has been carried out, and I am sure that he is also."

Regimental Commander Nakayama then introduced all the officers to Lieutenant Burnett, and the exercises came to an end at 6:30 P. M.

FIELD ARTILLERY.

Colonel Tobimatsu, the regimental commander, is considered one of the leading field artillerymen in the service, and he certainly impressed me as being a most able man. I do not profess to know a great deal about field artillery, but the drill, in its general features resembles our own. The battery is composed of six guns, although several artillery officers told me they preferred the four gun battery. The gun-carriage, limber, etc., were painted olive drab, but the gun itself, was black. As the supply of horses is limited, there were no caissons at drill. The officers complained of the small horses; too light they said, for fast work or heavy going. For economical reasons, the off-horses have dummy saddles, which cannot be ridden. One chief of platoon was an infantry officer, while a chief of section was a cadet from the Military

Academy at Tokyo. The regiment does not do much road work as the bridges in the vicinity are too weak to stand the weight and have to be specially repaired when the regiment goes to maneuvers. The officers say that the gun, itself, is superior to the one used in the recent war, and one of them added: "But the courage and skill with which the piece is handled is of more importance than a slight superiority in the piece itself," which struck me as good field artillery doctrine.

The barracks were not finished off like our own, but were immaculate; the men take off their boots in the lower hall, and put on slippers while in barracks. Clothing was carefully folded on shelves, and boots were hung on pins on the walls. Iron bunks and mattresses are used, with an interval of from one to three feet between bunks. Mess tables of plain wood were in each squad room, and were used at odd times for writing letters, etc. There were no libraries, amusement rooms, dining rooms or kitchens. There is one sergeant cook to the regiment, men being detailed by roster from each battery as assistants, no particular skill being required to cook rice in the big iron boilers by steam.

FIELD FIRING.

The summer field firing of the infantry was in progress at the divisional maneuver grounds near a place in the foothills called Sekiyama, some twenty miles from Takata. The maneuver grounds are sufficiently ample for divisional maneuvers, hence afford abundant room for both rifle and field artillery firing. The ground is covered with a short, thick growth of shrubbery, rather difficult for cavalry and infantry, and impassable in many places for artillery. Situated in the foot hills of the mountains, the terrain is generally rolling, affording splendid cover from both observation and fire.

On the day of my visit, the firing was by company at ranges from 1,200 to 600 meters, the targets being in echelons in three lines. No. 1 (nearest target) was composed of a row of prone, khaki-colored disappearing skirmish figures with varying intervals, capable of being so manipulated that either the right half or left half could appear alone; No. 2 was echeloned to the rear of No. 1, at about 150 meters distance, its construction and

manipulation being the same as No. 1; No. 3 consisted of kneeling figures in echelon about 200 meters in rear of No. 2. The targets were directed by the battalion commander from the firing point, by means of both telephone and large signal flags. The markers in the pit wore white shirts, which rendered their presence unmistakable.

As the firing was by company, the battalion commander was in direct charge of the shooting, although the colonel was also present; the latter followed close behind the firing line, and after the exercise was concluded, gave a critique. The officers and non-commissioned officers (of superior rank), of the companies who had already fired, were also present. Two officers acted as umpires, carrying a large flat board upon which a blank form was attached. These umpires noted down the company's commanders estimate of the range, the time and number of shots fired at each range, the fire discipline, ability to hear the company commander's and subordinate's commands, the manner of deployment, and any other points connected with the exercise that might be of service to the battalion commander to whom their reports are submitted. By means of these reports the battalion commander, after the result of the firing is known, is able to tell in some measure at least, why the firing at certain ranges was good or bad, and assists him in properly rating the company commander.

Without going into the subject of field firing in general, which is beyond the scope of this paper, I will describe as near as possible what I actually saw. I should preface this description with the statement that the ranges are supposed to be unknown to the officers of the company firing. I tried to find out whether they were actually unknown, or only theoretically so. Some officers said that they were really unknown, while others admitted that a pretty good estimate could be formed because the ground was well known, and the targets were fixed for that year.

The company about to fire, being under cover, in close order, some distance in rear of any possible firing point, the battalion commander assembled the company officers and superior non-commissioned officers and explained the problem for that particular company, the problem being different for

each company of the battalion. The officers then returned to the company, which was deployed and an advance was made in the direction indicated by the problem; in this particular case it indicated the sector of the firing line this company was to occupy. Upon arrival in rear of a well defined ridge, the company was halted and the officers with their field glasses crept up to view the country for a possible enemy. After a few seconds waiting, a few skirmish figures could be seen, at a range I afterwards learned to be about 1,200 meters. The company commander, after a short consultation with his officers, signalled the company forward, the men keeping well under cover, and halting at places indicated by the officers and non-commissioned officers. The target was then pointed out to each squad, and the men fixed themselves as comfortably as possible, conforming to that general direction. The range was then announced, and commands for firing given by the company commander, the commands in every case being repeated down the line by the officers and file closers, and the firing began. After a short interval, a new row of figures on the right, some 350 meters closer, was discovered. Commands for the right platoon to fire on the new target were given and carried out at once. Upon the disappearance of all the targets the command to advance was given, the men forcing their way with some difficulty through the thick brush. The company was again halted under cover, a new target at a different range appeared, and the former process was gone through with.

At each range more than one target would appear, and the company commander would designate the particular section or platoon that would fire on the new target, and the change was always made quickly and quietly. At one time a target appeared about 350 meters in rear of the one upon which the company was firing. This target was quite clear, more so than the nearer one, but no attention was paid to it, as they do not fire at the second line. This company's fire was slow and deliberate, the file closers watching the men closely and occasionally verifying the sights. Even at the longer ranges, all fired with the same range. I was told, however, that sometimes a difference of 50 to 100 meters was employed by the different platoons.

The firing completed, the company officers and superior non-commissioned officers were assembled, and the battalion commander, Major Yamagucki, who criticised in a general way, the conduct of the firing, notes being taken by the company officers. The non-commissioned officers were then sent to the company, and a more personal talk made to the officers; their faults and mistakes were pointed out clearly and methods of improvement suggested. This talk finished, all the officers of the battalion were assembled and were addressed by the colonel. The regimental commander used the exercise just completed as a text for a general critique upon the subject of combat firing, talking for about ten minutes.

The problem for the next company apparently called for all firing to be done from one firing point, although the range changed several times within the limits of the targets. Forty rounds were fired in eight minutes, its general features resembling that of the company already described.

During this field firing I was especially struck by the excellence of the fire discipline. The appearance of a new target caused no confusion; the new range was quickly estimated and a unit designated to fire upon the new target. Other points worthy of note were the real value of the file-closers; the absence of the trumpet; the part taken by officers, other than those of the company firing. These officers followed the firing line closely, observing the commands and dispositions of the company commander. The battalion commander, who by his own observations supplemented by the reports of his umpires would be able to tell, to a considerable degree, after the results were announced, just why they were not better. The talks of the battalion and regimental commander made one feel that their officers were being instructed at the proper time in all that pertains to field firing, by men who knew what they were talking about.

FENCING AND GYMNASTICS.

I trust that my great interest in this subject has not rendered me over-enthusiastic for to my mind, this subject is one of greatest importance.

The Japanese, from time immemorial, have been a sword-fighting people, and the basic idea that they must get within

rm's length of their enemy is hammered into the soldier from morning to night. At Port Arthur, General Nakamura led 2,000 swordsmen against a Russian fort; of course he was defeated with heavy loss, but it shows the trend of Japanese thought in regard to hand-to-hand fighting. Naturally, if the men haven't the confidence that they will easily whip their enemy in such a fight, they will not be so very anxious for the shock. It is this confidence that the Japanese system of fencing tries to impart, with what I believe to be, remarkable success.

The Japanese soldier is not taught so much to *fence* as he is to *fight* with sword and bayonet. All the little niceties of fencing etiquette which have come down to us from Europe, are utterly ignored. His one idea is to overcome his opponent, and anything which tends in that direction is most commendable; the principal idea is to kill the opponent, and he has skillfully adapted the means to that end. I asked an officer why the men did not resume the guard after one of them had been struck. He answered, that in actual battle such a thing would not be done, and it is impotrant to impress upon the soldier that he is to keep on fighting, even though struck.

In order to have the soldier fight fiercely, an adequate armor is necessary, and it must be admitted that the Japanese head-piece and corselet, are admirably adapted for the purpose. The hardest blows are said to cause no pain whatever; and I should judge it to be true from the character of the armor, itself. I shall try to describe its general features.

Imagine the pictures you have seen of the old samurai, or recall the armor for sale in many curio shops, and you will have a good general ieda of the fencer's appearance. The head-piece, in a general way, resembles those of our own service somewhat, except that strong, convex iron bars take the place of the wire netting over the face, while thick, wadded pieces of cloth, attached to the head-piece, protect the neck and neighboring regions. The corselet proper is made of thin bamboo plates, in some cases covered with leather, and from its bottom edge hang thickly wadded pieces of cloth. Both hands and arms are covered by padded gloves and armlets. For bayonet fencing, the corselet extends farther around the left side, and

a large padded, heart-shaped piece is hung over the heart. This armor costs about thirteen yen in Tokyo.

The fencing saber is not the light slender stick of our own service, which breaks so easily, but rather a bundle of bamboo sticks bound together at the middle and tip with leather; it is nearly round, and not so heavy as the service saber. The infantry officers, in time of war, carry a two-handed sword, not as a badge of office, but as a weapon, the hilt being long enough to be grasped with both hands, with quite an interval between; they fence with a bamboo model of their sword. The fencing

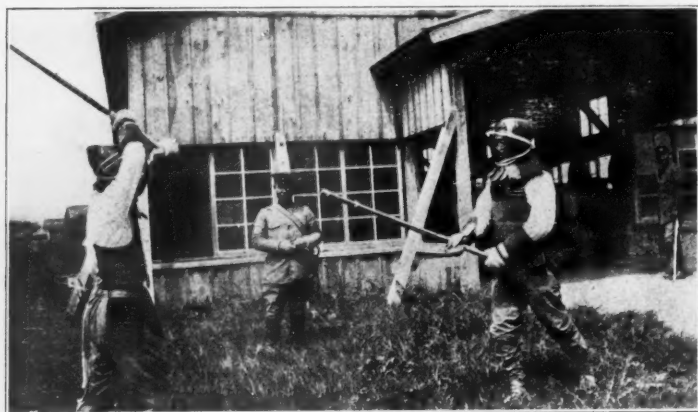


FENCING—INFANTRY TWO-HANDED SWORD VS. SABER.
Lieut. Col. NAKAYAMA in the Center.

bayonet is a rough model of the rifle with a padded ball on the end, the length being equal to that of the rifle and bayonet.

The opponents face each other at a distance of about fifteen feet. Each having called out their regiment, company and name, the referee commands: "Commence!" They take the guard and advance toward each other with an abundance of life and vim. Yelling like Indians, either to encourage themselves or intimidate their opponent, they are apparently possessed of but one idea, and that is to "whale" the life out of the other man. They hit before, during and after a clinch, and I saw one man deliver a very fair imitation of a short-arm jab with

the hand that wasn't otherwise occupied at the time. During the fight, the opponents practically clinched, and then they trip and throw each other if possible. With the two-handed sword, men were occasionally knocked down, and the unfortunate one certainly gets all that is coming to him, until the referee judges that he is finally disposed of. The men who are down defend themselves very well, that apparently being part of their training. The front cut is the favorite form of attack, occasionally varied by a cut against the left side, or a thrust. Mounted fencing exercises are also practiced, but the officers



FENCING—SABER VS. BAYONET.
Lieut. Col. NAKAYAMA In the Center.

say that it is very bad for the horses, as they were struck so often.

In the bayonet versus the bayonet fight there was a great deal of clinching, pushing and shoving. Straight thrusts at the heart were commonly used, varied at times by an attempted cut with the edge of the bayonet—the latter cut, however, was not usually successful. No fancy or complicated movements were used and the feint was little practiced.

The two-handed sword versus bayonet was a most interesting combat. At the guard, the point of the saber is lowered to meet the bayonet, and both men move very cautiously.

Footwork in this contest was more elaborate, yet few feints were used, the bayonet having a slight advantage in the end. In all these contests, the yells of the combatants, the striking, pushing, tripping and "swatting," made a most excellent imitation of a real fight.

The barrack yards of the cavalry, infantry and field artillery have gymnastic apparatus, consisting of the long horse, parallel and horizontal bars, installed. Either bar of the parallel bars can be raised or lowered at will, and it seems to be a favorite machine for a combination of horizontal bar exercises.



FENCING—THE FAVORITE FRONT CUT.

Exercises on these machines are carried on each day, officers up to a certain grade participating, as well as the men. Some rather difficult stunts were done on the horizontal bar. All the apparatus could be easily made by a troop carpenter and saddler with but slight expense. The great advantage of such an apparatus being its convenience to the barracks. In that respect, as well as being out of doors, it is quite superior to our small indoor post gymnasium, with its usual slippery floor. I could not help thinking how valuable such an apparatus would be in the vicinity of our barracks, even though a few fancy flower beds and gravelled walks should suffer thereby.

The Japanese assign great value to fencing and gymnastic exercises, and it is a part of their daily work, not a side issue, as is so often the case with us. They have but a short time to develop very raw material into seasoned soldiers, and they claim that these exercises form no small part in such a development.

The subject of promotion in the Japanese army, as in all armies, is a matter of more than passing interest to the officers, at least. They have a mixed system of selection and seniority, the former largely predominating. It would seem that Japan would be a model country for promotion by selection, as the



FENCING—TWO-HANDED SWORD VS TWO-HANDED SWORD.

superior officers are usually in command for a number of years, and know their subordinates in a way hardly possible in other armies. Then, too, political influence is not supposed to be of such importance as in other countries. I talked with a number of officers on the subject, and I could not help coming to the conclusion that there was some unmistakable flies in the ointment even here. One young officer from the staff college was very much in favor of such a scheme. "It makes the officers work very hard, and improves their discipline," he said; "but it makes officers very angry when they are not promoted for years, and finally retire as first lieutenants or captains."

Other older officers were not so enthusiastic; there are such things as political and family influence even here, and merit is not always triumphantly rewarded.

Although of subaltern rank, and on an unofficial visit, I was treated most kindly and courteously by every officer and enlisted man with whom I came in contact. My four days' stay was most pleasant and enjoyable, and it was not the fault of my courteous hosts that I did not see more, or observe things to better advantage.



CAVALRY IN MANEUVERS.

BY CAPTAIN G. W. MOSES, FIFTEENTH CAVALRY.

AFTER being asked to write an article for the JOURNAL on the employment of the cavalry in the Wisconsin and Kansas maneuvers, I spent some time trying to decide on the best method of handling the subject. The result of my deliberations is that I believe any exact description of how the cavalry was used at various times, with remarks thereon, would be too personal to be advisable. I shall, therefore, attempt to state what I believe was or should have been practicable for the cavalry in these maneuver campaigns and allow my readers to draw their own conclusions and form their own criticisms.

Cavalry at maneuvers is hampered badly by one restriction which is, unfortunately, always present. In actual war horses and men can and should be worked to the limit of endurance when the tactical situation demands it. In the maneuver campaign the squadrons can be worked only to the point where no lasting injury is done to the mounts. The commander is continually confronted with the problem of getting results without overworking his mounts and any one who starts out to criticize the results obtained by cavalry in maneuver campaigns must keep this consideration always in mind. Any employment of the cavalry which does not allow the horses undisturbed rest for the hour just preceding dawn should not be countenanced and restrictions should always be placed on both sides which will lay the blame on the cavalry commander should this rule be violated. Otherwise some officers will always begin the movements too early in order to avoid working the men in the heat of the day. It is not the purpose of this article to engage in the never-ending controversy as to the relative advantages and disadvantages of early rising for dismounted men, but there can be no argument as to the effect on horses of losing their rest at the only time when most of them ever sleep.

In maneuver campaigns such as those under consideration, far reconnaissance is out of the question. The problem opens with the two sides within the radius of nearby reconnaissance so only the latter can be performed.

The maneuvers usually begin with the advance of a detachment or a division acting alone. Under such conditions the cavalry should almost always be under the orders of the advance guard commander. Exception may occur, as, for example, where it is desired that the cavalry be sent more than one day's march ahead to seize an important position with a view to holding it until the arrival of the infantry. Under no circumstances should the cavalry be made independent and given so many missions that, if the enemy plays the game, the chances will be all against the accomplishing of anything worth while. All of the energy of the cavalry should be devoted to the accomplishment of the most important mission and nothing else required of it, unless it be something which may be done without endangering its success in that undertaking.

When ordered out in front of the infantry the cavalry should be given enough start that it may advance from observation point to observation point along the route assigned to it. The commander-in-chief should bear in mind the best method which should be pursued by the cavalry commander when on this duty, and allow him sufficient time to make his disposition.

There is absolutely no normal formation for advance cavalry but some such general scheme as the following should be selected; the main body should march on the road assigned, sending out strong patrols about one and one-half miles to the front and similar patrols on side roads so as to cover a front of from three to five miles. In addition to covering patrols should be sent out on all side roads to the nearest high ground, to remain in observation until relieved by the patrols from the advance guard, efforts should also be made to keep the enemy's patrols from securing commanding points which would allow him, if undisturbed, to observe the march of the main body. Observation patrols should also be sent out with specific tasks such as to determine whether the enemy, which has today reached Six Corners, marches, tomorrow toward Lansing or toward Bonner Springs. This patrol should first get in touch

by getting on high ground which commands Six Corners. It must then reckon on being obliged to drop back from position to position until it has assured itself of the route taken by the enemy.

The commander of a maneuver army should remember that the main body of cavalry cannot, under maneuver conditions, do much better than three miles an hour in a hilly or rolling country and secure proper reports from his patrols and allow the covering patrols to rejoin promptly, or he should not allow his patrols to average more than six miles per hour.

If a cavalry commander is sent out with orders to locate the enemy's main body and to determine its strength and he is engaged by the enemy's cavalry, he must not discontinue reconnaissance but must take advantage of the preoccupation of the enemy to slip by observation patrols which may be able to obtain results whatever may be the final outcome of the cavalry combat.

The cavalry commander should be at all times informed as to just what information the detachment commander is in possession of so that he can inform his patrols as to what information is of value, as a guide to them in maintaining as efficient messenger service.

Unnecessary patrols must be avoided and each patrol should be given a specific mission such as the observation of a certain sector or road. When practicable it should be told when and where it should rejoin the main body.

It must be born in mind that, while opportunities for observation on the enemy's flanks are usually good, messenger service from such a position is very difficult and quite dangerous, and the probability of getting back messages in time to be of any value is so slight as to scarcely amount to a reasonable chance. I do not mean that it should not be attempted, but I do mean that a patrol leader who fails under such conditions should not be severely criticized.

As soon as contact has been established with a force of the enemy of greater strength than the cavalry, near by reconnaissance should be taken over by the infantry and it becomes the duty of the cavalry to continue observation on the flank. The

commander of the troops should designate the flank on which reconnaissance appears to him to be most required and of most importance. The main body of the cavalry will be ordered to that flank and a strong patrol or weak detachment to the other flank. Higher headquarters should then make it a point to keep the cavalry commander constantly oriented.

The cavalry command should seldom, if ever, be immobilized by dismounting it to re-enforce the infantry. The all-important mission for it in the earlier stages of a battle is to locate the hostile wings and depth formation. If the enemy has out combat patrols and is using his cavalry properly, the accomplishment of this all-important mission will fully occupy the cavalry commander.

It is a sure thing that this result can not be accomplished by simply taking a position on the flank and staying there. The cavalry commander must utilize his mobility and occupy commanding positions on the flanks. To do this he will usually find himself obliged to defeat the enemy's cavalry.

In the defense, these positions should be well out in front of the flanks from the very start.

In any event battlefield reconnaissance can not be carried on by the most efficient patrol service unless the patrols are closely supported by a strong and well led body of cavalry of sufficient strength to open the roads and give them necessary support.

In conclusion I should say that the patrol and messenger service of our cavalry was excellent and showed vast improvement over previous years.

The importance of screening duty was underestimated, very little effort having been made to keep hostile patrols from favorable commanding points.

More attention should be paid to proper war methods of reconnaissance, especially after close contact has been gained.

Unsupported patrols sent far out from a small force of cavalry lessen the fighting power of the main body, exhaust the horses and rarely accomplish beneficial results. They should only be resorted to as the exception and not as a rule and not too much should be expected of them.

I might add that, in my opinion, the maneuver campaign is, beyond comparison, more valuable than the ordinary maneuver, as a means of training cavalry for war. Greater care should be used in the future, however, to prevent the opposing sides from learning the proposed camp sites as this knowledge has a constant influence on the dispositions and plans of the commanders.



A SOLDIER COLONY.

BY MAJOR ALONZO GRAY, INSPECTOR GENERAL.

OF the important military problems that confront this nation today, three may be solved by establishing a Soldier Colony. They may be stated as follows:

1. Providing sufficient and suitable remounts for the mounted service.
2. Maintaining an adequate trained reserve to be used in time of war.
3. The development of a type of man suitable for military service.

Let us make a short statement of the proposition and then see how the above problems naturally find a solution.

The government is now engaged in numerous irrigation projects which, when finished, will place under cultivation many thousands of acres of land that will then be worth from \$100 to \$400 an acre. Suppose the government set aside sufficient land for the above mentioned purpose and divides it into lots from ten to twenty acres each, according to its value, and then offers a life lease to any honorably discharged soldier with character very good or excellent on condition that until forty-five years of age he shall be subject to call for military duty in case of war or public danger. Soldiers living in certain circumscribed localities would constitute a completely organized company, troop or battery. Adjacent companies would constitute battalions.

The battalion would constitute the administrative unit, and, at a central locality, have established its headquarters where would be found the battalion school-house, armory, hospital, exchange, etc. These institutions would be run by retired officers and post non-commissioned officers on full pay.

Every soldier accepting an allotment would be encouraged to marry, subject to physical examination. His wife should

also be subject to physical examination by the battalion surgeon so as to take reasonable precaution that children resulting from the marriage would be healthy specimens of the human race.

The battalion headquarters would thus become the social center of the battalion. Children would assemble here for school which would be of the military type and boys would grow up accustomed to discipline and the use of arms.

Girls would form attachments which would ultimately result in their marrying into the colony. If a young man wanted a girl for a wife and they wished to remain in the colony, he would have to serve his enlistment before he could get her.

The armory would contain all the uniforms and arms of the battalion and be under observation and inspection all the time. The hospital would provide for the sick and, if thought advisable, the compliment of sanitary troops might be maintained.

The exchange would be a co-operative general store where the members of the colony would be permitted to purchase at cost. It would be run without profit. Here at the headquarters would also be a drill ground where at certain seasons of each year the members of the battalion would be required to undergo a period of instruction.

The foregoing is only the bare outline of the scheme with no attempt to arrange the details.

As to the solution of the first problem, nothing could be simpler. If the colonist owned a mount suitable for military purposes, the government would guarantee that in case of being called into active service, the owner should receive a stipulated sum, or a per diem rate, for the use of the horse. In addition, the government could maintain a stud with free service to suitable mares with an option on the colt at three years of age.

The second problem is solved by reason of the conditions for entering the colony. It would not be necessary to pay colonists except during the annual training period or when called into active service.

The third feature of the problem deserves greater consideration in order that its necessity may be made apparent. In

homogeneous nations, like France, Germany or Japan, where military service is compulsory, the whole nation is one vast military colony. The case of the United States is, however, entirely different. It has no unified nationality. Its regiments are composed of men of every nationality, race and color. Of every color since persons born in the United States are citizens thereof. In handling composite regiments there will be no continuity of mind. The erratic bearing of men of volatile temperament will communicate their fear to men who, under favorable conditions, would never think of wavering at critical moments. The stability of the battle line will be less on account of the mongrel personnel composing it. It is, therefore, necessary in order to raise a patriotic and efficient army, to fill its ranks with native born soldiers, sound in mind and body and with a conformation suitable for the work required. The records of the Civil and Spanish Wars will show thousands discharged on certificate of disability because they were not strong enough to stand the hardships of an active campaign. The result is a pension roll of \$150,000,000 a year or in fifty years of \$7,500,000,000 which is quite a handsome sum to pay for the folly of enlisting those who were largely inefficient when enlisted.

It will be said that such a colony would not supply the necessary numbers in time of war. Quite true, I answer, but the numbers supplied will be in proportion to the size of the colony and each one will be worth three of the ordinary enlistments.

Will discharged soldiers voluntarily engage in such an enterprise? They are clannish and if the colony is once made popular they will flock to it in great numbers. Will young and healthy women marry into such society? I believe they will. The home instinct is so strong that many girls would willingly quit domestic service to help build their home.

It will probably be said that the foregoing plan is chimerical. I answer why? You say it is not in accord with the genius of our people. I answer: the only nationality we have, was organized on very much the same plan, except, to its detriment, it was lacking in military control. The lack of homogeneity in our people is rapidly growing worse and unless emigration is stopped for fifty years so as to allow the conglom-

merate assembly of individuals to amalgamate, there will soon be no American race with a national sentiment.

What a fine opportunity this is for those who wish to pursue the science of Eugenics.



OBSERVATIONS ON THE WORK AT SAUMUR.

BY CAPTAIN CONRAD S. BABCOCK, U. S. CAVALRY.

I HAVE the honor to submit the following report on my work and observations while on duty at L'École d'application de Cavalerie, Saumur, France.

THE SCHOOL.

The French Cavalry School consists of the following classes:

1. Lieutenant-colonels and majors of cavalry—course about six weeks.
2. First lieutenants of cavalry and field artillery.
3. Second lieutenants of cavalry.
4. "Aspirants" (non-commissioned officers of cavalry).
5. Veterinarians.
6. Trumpeters (soldiers).
7. Horseshoers (soldiers).
8. Signal Corps men (soldiers).

With the exception of the Field Officers class, the course for all officers and the "aspirants," began October 1, 1911, and ended August 5, 1912.

I was assigned to the first lieutenants class, as were all the foreign officers, except two Chinese second lieutenants, graduates of St. Cyr, who remained with their St. Cyr classmates in the second lieutenants class. Instruction was given the first lieutenants in equitation, hippology (including theoretical blacksmithing), military art, fencing, rifle and pistol practice, cavalry drill, French regulations, the German language (foreign officers not expected to attend) and many lectures on military and political subjects.

The equitation consists in training a young "green" horse, learning and practicing the aids on a trained or manège horse, and riding the jumpers over obstacles in the manège and outdoors with and without stirrups, the horses being equipped with a double snaffle bridle during most of the year.

All the manège horses are thoroughbreds; part of the jumpers are also thoroughbreds, the majority, however, being the "demi-sang"; great, big powerful animals, a cross of thoroughbred on the Norman horse.

In all, some 1,500 horses are used in this school, and a walk through the long stables is an education in horse flesh and stable management.

All the horses are fed *grain* only *twice* daily (this is also the regimental practice), after the morning's work, usually about 10 A. M., again about 4 P. M. Hay is fed early in the morning and with the evening grain.

Except when at work, horses remain in their stalls, well bedded down with real straw. The stalls are paved with stone blocks or concrete; the mangers are stone, also the watering troughs.

I did not see or hear of a case of "thrush" and all the horses were in the pink of condition.

With the regiments on a march, no grain is fed until about 10 or 11 o'clock A. M.; the horse is then fed by its rider from the ration bag carried on the saddle.

At Saumur and elsewhere in the French cavalry, the demi-sang is docked, the thoroughbred's tail is cut square at the hocks, and all the manes are pulled to a length of about six inches; this latter practice gives the horses a very uniform and handsome appearance.

It is difficult to compare Saumur with our school at Fort Riley as the latter is practically given over to equitation alone, while at the former one-third of the course covers military work applicable to cavalry, and the instruction is imparted principally by practical work and lectures—few recitations. No marks are shown the student officers. Very thorough oral and written examinations are given during the year.

The most noticeable feature of the school are the facts that in equitation and military work no junior instructs a

senior, that your official position is never forgotten, and that the student officers *always* present a neat, soldierly appearance. No attempt is made to find anyone deficient, but every attempt is made to improve each officer; and, of course, after a ten months' course, it follows that every individual does improve.

* * *

The method of training a remount, while excellent in an army at practically war strength, lacks the necessary speed to be entirely practical with us; but the principles are correct and we have adopted them rightly at Fort Riley.

The method of instruction in Equitation at Saumur may be said to be one of observation. The instructor is always ready to assist, but one is expected to observe the faults or correct work of one's comrades. One is not driven to work, no yelling, scolding or humiliating remarks are made. Cross country racing, steeple-chases, wild boar and deer hunting with dogs are open to the Saumur student, although, in the obstacle races, a married French officer rarely rides.

The school keeps and uses race horses—in fact every effort is made to encourage horsemanship, the ownership of a fine horse and to awaken a real “up and doing” cavalry spirit.

While the French cavalry officer yearly wins prizes in horse event all over Europe, it is astonishing to find that *in training* both at Saumur and in garrison, the obstacles used are never very high. While one at Saumur is taught to ride boldly over jumps, one usually mounts a thoroughly trained jumper and then never jumps in training a solid obstacle over four feet high.

To encourage the American officer to jump his horse or ride over country, I believe we should adopt the Saumur system—which is to train him and his mount progressively. Never attempt anything your horse hasn't a fair chance of accomplishing. Properly taught and encouraged, the red blood in our American officer will make him second to none.

Instead of tanbark, the five riding halls of the school are floored with sawdust. It is less dusty, cheaper, and answer the purpose as well as tanbark. Its freezing qualities, as compared to tanbark, could not be determined at Saumur, as the

temperature only reached that point once or twice last winter; but the French officers told me that sawdust is used in all the riding halls of France and no trouble results. The sawdust is clean, free from dirt, and comes from clean board sawing, not kindling or low grade fire wood.

THE CLASSES.

The "Aspirants" (non-commissioned officer candidates) undergo at the school, a ten months' course in equitation, military art, military exercises, fencing and a few academic subjects. Graduates become second lieutenants of cavalry. That their course is superior to our method of commissioning soldiers seems hardly open to question.

Upon graduating from St. Cyr, the second lieutenants for cavalry undergo a ten months' course at Saumur in equitation, military art, etc., and upon graduation report to their regiments as first lieutenants.

Therefore, before joining his regiment as an *officer*, the new first lieutenant has served one year as a soldier in a regiment (under universal service law); two years at St. Cyr as a cadet; and one year at Saumur as a second lieutenant.

Before serving as an officer, the first lieutenant has had two years practical work (not considering his course at St. Cyr); in equitation alone he rides in the *ten months* at Saumur nearly seven times as much as the West Pointer does in *four years*; in addition, he has been well instructed as a soldier, and has had a hard and thorough course at St. Cyr, where the cadet rides on an average of three hours daily for two years.

The first lieutenants at Saumur have all been there before, either as second lieutenants or aspirants. I have described their course. Many of them are well known all over France and elsewhere as fine horsemen; however, that is not taken as any reason for escaping the equitation part of the course. They share all the pleasure of riding a rough horse without stirrups with their less celebrated classmates.

All first lieutenants do not pass through Saumur. To enter, one must be especially recommended—this occurs usually about seven years after their first graduation.

The French cavalry officers belong, generally, to the best families in France; that they are imbued with a real cavalry

spirit, an untiring energy, and a determination to retrieve 1870 was impressed on me daily.

I have lived for ten months on most friendly relations with a hundred or more French lieutenants, captains, and field officers; and that they form an efficient, capable, energetic class of cavalry officers is only too apparent.

While it is possibly true that they may still see visions of successful cavalry *charges* where we see only defeat, still they are becoming more conservative but *retaining* what we are losing—the *will* to charge, the *belief* that mounted work is not over. They *seek* (as they say) the opportunity to charge. Without this cavalry spirit and ambition, who can ever lead cavalry?

FRENCH CAVALRY.

The Reserve Cavalry (Cuirassiers) are mounted on half-bloods and large thoroughbreds, ranging in height from 15.3 to 17 hands and weighing from 1,100 to up possibly 1,500 pounds. The steel helmet and double cuirass is worn, and a carbine and long straight saber is carried by the enlisted men. The officers and a few non-commissioned officers carry a small caliber revolver and the saber.

The Dragoons (or cavalry of the line) use thoroughbreds or large anglo-arabs, corresponding generally to our cavalry. They wear the steel helmet, but no cuirass, and are armed like the Cuirassiers.

The Light Cavalry (Chasseurs and Hussars) use small thoroughbreds and anglo-arabs, as small as 14.1. No armor is worn by this cavalry, who carry a lance, saber and carbine. The assignment of any horse depends almost entirely on size, weight and conformation, not on breeding.

French cavalry horses seem to be usually free from splints, side bones, spavin, etc., and considering the hard roads and the paved stone streets on which these animals work daily, I can only account for this from the fact that before any horse is worked hard, he is aged—that is six or seven years old.

I had heard before coming abroad that French cavalry horses were unusually free from sore backs. From absolutely reliable information, I know this is not the case. They suffer from this cause as much as we do.

In each French Cavalry Squadron (during active hostilities) there are 100 petards carried by as many privates, and 50 detonators by the non-commissioned officers. The petard consists of 150 grams of melinite, packed in a water proof can about seven inches long and one inch in cross section. At one end there is a small hole one-fourth inch in diameter in which the detonator is inserted. I am told that the petard is absolutely fool proof. In actual use, I have seen it cut a heavy railroad rail.

I am under the impression that our cavalry lacks anything of this sort, and am confident we should adopt something as easily used and handled as this French petard.

Cavalry drill and maneuvering is conducted almost entirely by signals; I have followed a brigade of Cruissiers for three hours at drill and battle exercises and in all that time heard fewer commands than the average American troop commander gives in half an hour. Often for twenty minutes at a time *no* commands nor trumpet signals were given; the brigade in the meantime was executing movement after movement at a gallop.

Thirty years ago, Second Lieutenant S. C. Robertson, First Cavalry, attended this school and rendered an interesting and valuable report. I could put my name to his report today and submit it as mine, so slight has been the change at Saumur.

But, until six years ago, none of his recommendations or suggestions in equitation were adopted by our government. Thirty years ago, this officer pointed out the benefit of rising to the trot. I can add nothing to his arguments on the subject; that our cavalry should adopt it is my firm opinion after eight years trial.

Lieutenant Colonel Blacque Belair, the Ecuyer en Chef, has been very polite, considerate and friendly to the American officers. Should our War Department make some acknowledgment of his courtesy, it would, I know, be greatly appreciated. Colonel Blacque Belair's duties are arduous, and with several hundred students and instructors to superintend, that he should have put himself out to assist the American officers has been considered by us as a high honor.

THE AVIATION SQUADRON IN THE CONNECTICUT MANEUVER CAMPAIGN.*

BY CAPTAIN F. B. HENNESSY, THIRD FIELD ARTILLERY.

I HAVE the honor to submit the following report and recommendations regarding aviation matters, as a result of the participation of the Aviation Squadron in this maneuver division.

The squadron reached camp the evening of August 8th, with the following personnel:

Captain B. F. Hennessy, Third Field Artillery.

First Lieutenant Harry Graham, Twenty-second Infantry.

First Lieutenant Harold Geiger, Coast Artillery Corps.

One sergeant, four corporals and seven privates of the Signal Corps.

The following day was spent in unloading from train and assembling the following aeroplanes:

One Curtis, type Dual control war machine, seventy-five horse power, passenger carrying aeroplane.

One Burgess-Wright, type "F-25" thirty-five horse power, passenger carrying aeroplane equipped with wireless telegraphy apparatus.

One White two ton, thirty-horse power auto-truck.

Two forty-five foot by forty-five foot hangar tents and one special aeroplane shelter tent.

Two carloads spare parts, camp equipment, etc.

On August 10th Lieutenant B. D. Foulis, Seventh Infantry arrived and spent the day regulating and tuning up the wireless apparatus on Burgess-Wright machine No. 1.

*Compiled from the official reports of the writer, as Commanding Officer of the Squadron, and the several pilots of the aeroplanes, headings and subscriptions being omitted where practicable.

On August 10th Lieutenant T. DeW. Milling, Fifteenth Cavalry arrived and spent day regulating and flying experimentally Curtiss Machine No. 1.

On August 10th Private Beckwith Havens, N. G., N. Y., a professional aviator for the Curtiss Company reached camp and with his Curtiss passenger carrying aeroplane, type Dual control war machine, seventy-five horse power, was assigned to this squadron for duty.

On same date a detachment of one corporal and four privates, Signal Corps, N. G., N. Y., was assigned as manning crew for Curtiss machine of Private Havens.

On August 14th Lieutenant R. C. Kirtland, Fourteenth Infantry and Lieutenant H. H. Arnold, Twenty-ninth Infantry, reported for duty having attempted to fly the new Burgess-Wright hydroplane, type war weight carrying machine, seventy-five horse power, from Marblehead, Mass, to maneuver camp, but had met with an accident in Plymouth Harbor, where the machine was smashed, Lieutenant Arnold being slightly injured.

On August 11th, Sergeant Hartman was removed to hospital, Fort Jay, N. Y., and Sergeant Litherland and Private Levey reported for duty from Washington, the former as chauffeur of Chief Signal Officer's automobile and the latter as recorder of flights, etc.

The automobile of the Chief Signal Officer, U. S. A., which was to have been sent with the original shipment of equipment, did not arrive until August 16th, too late to be utilized by personnel of Aviation Squadron, thus handicapping work of aeroplanes assigned to the Red Army.

Beginning on August 12th, the first problems in scouting and reconnaissance were undertaken by Lieutenants Foullois and Milling and Private B. Havens, N. G., N. Y., whose reports upon same are hereto attached.

As this Aviation Squadron was the first one of its kind that had ever been regularly detailed as a unit of a maneuver division in the United States Army, neither the officers of the Aviation Squadron nor the majority of the commanding officers of the maneuver division knew exactly what the duties and limitations of the aeroplanes would be.

Thanks to the recommendations of Major Samuel Reber, Chief Signal Officer, Eastern Division, the following rules regarding general use of aeroplanes were adopted by General Orders 24, c. s., Eastern Division and closely adhered to throughout.

EXTRACT FROM GENERAL ORDERS 24.

36. The aviation section which will have immediate charge of aerial scouting and reconnaissance, will be attached to the headquarters of the Chief Umpire during the instructional period, and to the headquarters of the Blue forces for the final period.

37. During the instructional period specific scouting problems will be assigned to the pilots each day, requiring reports and maps of their reconnaissance. During the final period the Commanding General of the Blue Division will require the pilots to work on specific problems for information, requiring them in each case to make reports and submit maps of their fields of observation.

38. In order that the conditions of real war may be simulated, the pilot will rise to an elevation not less than two thousand feet above the ground before he begins his scouting and reconnaissance, and he will continue at that elevation until it is necessary to make a landing. To make sure that no information is obtained at a less elevation, the flight to rise to this elevation should be made when practicable, away from the ground in which information indicates that the enemy is operating.

39. In order that the pilot may have information as to his elevation each aeroplane will be supplied with a recording barograph with a six-hour clock movement, and at the beginning of the reconnaissance the time of lowering the pen on the paper will be recorded on the sheet. An aneroid barometer at the headquarters of the Chief Umpire will be read at fifteen minute intervals during the flight of the pilots and on the pilot's return his barograph record will be checked up and the altitude determined by using Table No. 20 of the Smithsonian Meteorological Tables, 1907. As a further check, each umpire should note the time that an aeroplane is in his vicinity and estimate the altitude over the troops. It will be assumed whenever an aeroplane flies over troops or in their immediate vicinity that it is under rifle fire.

Upon arrival in camp, on August 8th, it was found that a camp site for the Aviation Squadron had been tentatively selected between the two lines of tents occupied by the Chief Umpire's Staff and that of the N. Y. N. G., respectively.

This space was very restricted for aviation purposes, being surrounded on two sides by rows of tents, on one end by tall timber and upon the other end by a high stone wall, making startings and landings very difficult and at times extremely dangerous. While this ground was said to be the best procurable

in vicinity of the Chief Umpire's camp, it demonstrated the future advisability of the the actual presence on the ground of an officer of the Aviation Squadron, whenever terrain is hereafter being selected for maneuver or camping purposes.

It takes an experienced aviator to select proper starting and landing places, depending as it does, upon the type and speed of the aeroplane to be used. On account of the obstacles surrounding the field as mentioned, no passengers or observers could be safely carried, as there was not sufficient ground space upon which the machines could travel, before attempting to take the air, and this lack of observers proved a great handicap to the pilots during dusty weather, upon several occasions during these maneuvers.

There is no necessity for aeroplanes to be parked in the immediate vicinity of the camp of the Commanding General, as communication can be easily established and maintained by means of wireless telegraphy or telephone, supplemented by automobiles, with which all aeroplane squadrons must be equipped, if the highest efficiency is to be attained.

Thanks to the assistance given by Company "A", Signal Corps and the company of engineers, the aeroplane site mentioned was sufficiently cleared of projecting rocks, etc., by dynamiting same, which took about thirty-six hours of labor, before machines could safely attempt to travel over the rough rocky ground.

One of the first erroneous impressions that had to be corrected among certain officers of the service, was that the aeroplane could *supplant* the cavalry in scouting work and reconnaissance.

It must be accepted as the first principle of military aeronautics, that the aeroplane is merely an adjunct to the cavalry and the other branches of the army, for the reason that the present state of development of the science of aeronautics, the aeroplane is too uncertain to be yet accorded any fixed and definite rôle upon the battle field.

In Germany, 2,800 feet and in France 3,000 feet altitude is assigned as the minimum at which an aeroplane can safely travel in vicinity of troops in order to escape rifle and artillery fire. This being the case, it is readily seen that the aeroplane can

not be depended upon for scouting or reconnaissance either after dark or during heavy fog or hazy atmosphere, as witness during two days of the maneuver period, when objects of military value could not be distinguished at 1,000 feet altitude although the aeroplane could be seen from below, silhouetted, as it was against the clouds or fog.

Neither can the aeroplane maneuver in rain or snow storms for the same reasons, in addition to the personal inconvenience and risk to the aviator, due to his vision being impaired by driving rain or snow.

And in dusty weather with high winds the American aeroplane of today is practically valueless in the air, and had much better be securely wired down to the ground to be saved for future use, during favorable weather.

Having enumerated some of the *disadvantages* pertaining to the present type of aeroplane, it is now desired to illustrate to what great advantage it may be intelligently utilized when used in conjunction with the other arms, weather conditions permitting.

Given fairly clear atmosphere, with winds not exceeding more than about twenty-five miles per hour, a "warp type," two-passenger aeroplane, powerfully engined, can travel at a minimum altitude of 3,000 feet, remain in the air four hours continuously (pilot and observer relieving each other frequently in driving machine), during which time it can cover an area of 200 to 250 miles without landing to replenish supplies, etc.

During that period the observer can accurately plot the exact location, composition and strength of all military features of value after which the machine can return to its own landing place, and a prompt graphic and oral report can be made to the Commanding General.

Under those conditions a cavalry command would avoid the necessity of frittering away its strength in numerous and often useless small patrols, upon unimportant roads and trails, thus being enabled to continue its march in the desired direction and in a compact body ready to strike the enemy a sudden and powerful blow, either by mounted action or by dismounted fire effect.

The infantry could also feel secure and not be compelled to unnecessarily extend its line against imaginary possibilities.

With wireless telegraphy installed on aeroplanes messages have been sent from aeroplanes in France a distance of thirty miles, and in our Aviation Squadron at College Park, Md., for fifteen miles by Lieutenant B. D. Foulois, our wireless expert. Thus, under ordinary conditions messages could be transmitted to the wireless sections of the advance cavalry at a distance equal to one days ordinary march enabling the commanders to concentrate their forces whenever necessary.

All of this was shown on a small scale by the work of Lieutenants Foulois and Milling in inferior machines, they having remained in the air for periods of forty-five minutes to one hour and thirty minutes of continuous flight, which could have been much extended had they had sufficiently powerful machines to have carried two passengers who could have relieved each other.

The reports of these officers were said by the Chief Umpire and his assistants to have been very complete and satisfactory, considering the handicap they were laboring under, of having no observers to accompany them.

Another point which should be carefully considered in all future plans for the improvement of the aeronautical branch of the army, is that it requires a *trained* military observer to secure data of real military value, as witness the several occasions upon which Private Beckwith Havens, N. Y. N. G., (a professional exhibition flyer and trained aviator) made reconnaissance and returned with very meager reports, comparatively worthless, although he could have seen exactly the same things as he was covering practically the same territory at the same time as were Lieutenants Foulois and Milling. A comparison of the reports attached hereto will illustrate the difference mentioned and yet no one can deny that Private Havens was an expert aeroplaneist but without training as a military pilot and observer. It takes months and months of practice and experience to enable any officer to acquire the desirable faculty of observing military features of value rather than devoting his time and attention to the psychology of flight, such as falling out, etc., as do most inexperienced people when they are first taken up as passengers.

The terrain seen from an aeroplane bears quite a different aspect from that generally imagined and requires considerable

practice and experience in the air, to be able to differentiate between the valuable and negligible features of the landscape.

There was apparently a woeful lack of understanding regarding the necessity for cleared space for aeroplanes attempting to land, as shown when Lieutenant Foulois attempted to make his landings when trying to report to the Commanding General of the Blue Army. The spectators were permitted to rush into the field where Lieutenant Foulois attempted to land, endangering themselves as well as the aviator and machine.

It is necessary that all individuals be warned not to approach an aeroplane attempting to land and in case of machine making a forced landing, due to engine trouble, it may sometimes happen that the aviator will be forced to land in a field or space occupied by troops, who for their own safety, as well as that of the machine and aviator, should stand fast until it is seen approximately where the machine must strike the ground, thus enabling both spectators and aviator to avoid one another, it being borne in mind that an individual about to be struck by an aeroplane has a better chance to escape if he throws himself flat upon the ground, which enable the planes to pass over him without injury to all concerned.

In future maneuver camps, all troops should be notified to give every possible assistance to any aeroplane in their vicinity, especially so far as concerns the prompt transmission of information, etc., to the Commanding General, as the aviator may be exhausted and without means of transportation where delays might prove costly.

One of the pertinent features which was well illustrated throughout the maneuver campaign was the absolute necessity of a powerful auto-truck for each aeroplane for transportation of fuel, spare parts, etc., and for one passenger automobile for each two machines for the personnel, for speed is one of the most vital compliments of successful aeroplane reconnaissance.

The Chief of Staff announced at the end of the instructional period that due to the definite information the aeroplanes had brought in from their reconnaissance, it had been decided to divide the aeroplanes between the Red and Blue Armies, rather than place all machines with the Blue Army which would give it a distinct advantage over the opposing army. At the

last moment this logical plan had to be abandoned because the Aviation Squadron had only one auto-truck which was needed with the Blue Army aeroplane, and no auto-truck could be secured for use of Red Army aeroplane which was indispensable as an aeroplane must have its fuel, spare parts and personnel within reach in case of landing, especially where a forced landing has to be made often resulting in material breakage or personal injury.

Hereafter, it should be prescribed that for each aeroplane ordered in the field, an auto-truck should be provided for and one automobile for each two aeroplanes for the personnel.

This assignment of transportation is economical in the end for the reason that the same kind of fuel is used in all machines and the transportation can be utilized for hurried movements from place to place of the aeroplane camps and equipment thus not necessitating the furnishing of wagon transportation by the Quartermaster Department which rarely has anything to spare under the present field allowance.

RECOMMENDATIONS.

1. That the future type of truck should be a sixty horse power, four speeds forward and one speed reverse, gasoline truck, with a top similar to that of the present escort wagon, as the bows and canvass covers can be easily removed when it is desired to transport large planes. It should have spare tanks for transmitting in the field large quantities of high test gasoline for aeroplane motors, as difficulty is found in purchasing decent commercial gasoline.

2. That powerful motor cars be furnished for use of the personnel of aeroplanes, in scouting for landing places, transmission of data, information, etc. All transportation to be painted olive drab color.

3. That immediate steps be taken to secure powerful aeroplanes of two distinct types, one the weight carrying type capable of rising from ground quickly, while carrying pilot and observer and wireless telegraphy equipment and able to remain in air for four hours and travel at rate of fifty to sixty miles per hour. The other a "speed" machine able to climb rapidly and capable of carrying single pilot for four hours at rate of seventy-five miles per hour.

In order to accomplish the desired result it is thought that an aeroplane engine competition should be held at the Army Aviation School, Washington, D. C., about October 1, 1912. As many of the foreign and domestic manufacturers will have completed the International Aviation meet at Chicago Ill., in September and would be glad to demonstrate what their engines and aeroplanes can do, if invited by the War Department by circular letter and without expense to the government, a statement being published that the War Department will purchase such number of the successful machines and engines demonstrated as it may require.

It was only by such military competitions in France, Germany and England, that the armies of those countries were enabled to secure the serviceable military types of machines they possess today in such large numbers. In the end this move will assist the native aeroplane and engine industries, as they will have the foreign engines as models as to what they must produce, if they expect to receive the patronage of the War Department.

4. That efficient wireless sets be procured and installed in "war type" aeroplanes, all officers of the aviation service being required to study and qualify in the operation of same as soon as practicable.

5. That the large tent hangars are unnecessary except in permanent camps, as machines can be staked down, shelter for engines and propellers only being necessary.

6. That an Aviation Squadron be immediately organized and be stationed in each geographical division, complete as far as present appropriations will permit.

There are sufficient trained officers now in the service capable of organizing and training these three squadrons and all that is required is the support of the War Department to insure the success of this movement.

The whole subject of military aviation should be carefully considered by a committee of the General Staff, opportunity being granted to the members of the Aviation School to present their views, experience and recommendations in order that steady progress may be encouraged.

7. That an experienced officer of the Aviation School be sent abroad for the purpose of studying and reporting upon the latest development of military aeronautics in France, Germany and England. At the present time an officer can secure permission to study and work in practically all the French aeroplane and engine factories. Such permission will soon be difficult to secure, for soon the necessity for secrecy will be evident and advantage should now be taken of the present opportunity for a trained military aviator to acquire the valuable information which most of our military attachés are now unable to obtain, due to their lack of technical training and opportunity. If practicable this officer should be present at the German and French maneuvers in addition to any other military observers who may be sent from the United States.

8. That twenty more officers be detailed immediately to the aviation corps of the United States Army.

The House of Representatives has passed unanimously a bill to double the pay of army aviators, but limiting the number to thirty officers, etc. At the present time there are only ten officers detailed on this duty.

If the twenty lieutenants necessary are now detailed by the War Department, which will be at the rate of one lieutenant for every two regiments in the service (including Coast Artillery Corps), it is believed that Congress will be much more inclined to grant a request for further assistance. That it will not only give the desired pay but will make those detailed additional officers thereby creating vacancies in the line of the army. Then will we really begin to develop the Aviation Service of the United States Army, so that it will no longer remain in its present shameful condition in comparison with all the other first class nations of the world.

Acroplane reconnaissance August 12, 1912, over territory included in the area between Strafford-Derby-New Haven-Stratford made by Lieutenant Foulois.

Left headquarters camp at 7:25 A. M. Returned to headquarters camp at 8:31 A. M. Maximum altitude 3,800 feet. Proceeded southwest and west toward Bridgeport to attain an

altitude of 2,00 feet before commencing reconnaissance. Crossed Housatonic River near Baldwin about 7:40 A. M., altitude 2,100 feet, at same time sighted two large camps, one camp approximately one mile north of Orange, the other camp approximately one mile north of Marsh Hill. Proceeded north over Housatonic River to bend in river southwest of Derby; thence east over camp near Orange and Marsh Hill at altitudes of 2,500 and 3,000 feet respectively. Troops at Orange, approximately strength of four regiments of infantry and several small mounted detachments. About one-quarter mile north of this camp is a small camp evidently preparing to move. Proceeded northeast towards New Haven and Derby. Proceeded southwest following N. Y., N. H. & H. R. R. At about 8:00 A. M. sighted a camp about two and one-half miles east of Milford and about one-half mile north of the N. Y., N. H. & H. R. R. Passed over this about 8:10. Altitude 3,500 feet.

Troops at this camp, approximate strength two regiments of infantry, one regiment cavalry, one battery of field artillery or company of Signal Corps. Guns of battery or Signal Corps were still in park, but infantry and cavalry were apparently forming for some movement. No other troops or camps were sighted within the area Stratford-Derby-New Haven-Stratford.

This aeroplane flight was made primarily for the purpose of testing out the wireless apparatus. The weather was so rough that the attention of the pilot was constantly on the aeroplane and no attempt was made to use the wireless set as further mechanical improvements must be made to facilitate the handling of the trailing antenna. Considerable difficulty was experienced in distinguishing artillery from Signal Corps troops. This difficulty could have been easily overcome if an observer with field glasses could have accompanied the pilot.

Report of Lieutenant Milling on a reconnaissance August 13, 1912.

Left Camp at 6:45 A. M. Landed at 7:28 A. M. Proceeded in a northerly direction west of the Housatonic River towards Derby. Nothing was seen along the roads west of the

river nor in the vicinity of Dreby or Shelby. I circled over Derby and proceeded in a westerly direction towards Long Hill. What I thought to be about four batteries of artillery or companies of Signal Corps were camped at the point "A" on the accompanying map; one regiment of infantry at the point "B;" six companies of infantry at the point "C;" a small camp at the point "D" consisting either of a battery of artillery or a field company of Signal Corps and two troops of cavalry. About a platoon of infantry was seen to be moving south on the road about the point "E." None of the troops had broken camp as the shelter tents were still up and the troops were seen to be moving around. I was unable to discover any encampment at Long Hill and no troops were seen from then on. Between Long Hill and Derby the mist was so thick that I was unable to discern objects on the ground. Also at the point to the north and south and to the southeast of Long Hill houses could be discerned dimly but I was unable to tell the character of anything in detail.

Report of Private B. Havens, August 13, 1912.

Left 8:45; back 9:12. Altitude 3,000 feet. After reaching 2,200 feet flew to Housatonic River, followed river north to vicinity of Derby (B), then to vicinity of (C), then returned to (A).

Owing to hazy condition of atmosphere nothing of military value could be distinguished between altitude of 2,200 feet and 3,000 feet.

Report of Lieutenant Milling on a reconnaissance by aeroplane August 13, 1912.

Left camp at 8:27 A. M., returned at 9:30 A. M. Proceeded in a northerly direction west of Derby to Zoar Bridge, marked "X;" thence west to Sandy Hook station, marked "Y," turned at this point and returned flying southeast over Berkshire, marked "Z." On the road leading south east from Berkshire designated "A" on the accompanying map, a force of troops

evidently in formation of advance guard, main body, and rear guard, was seen either moving or preparing to move south along this road. The main body was about at the position marked "B" on the accompanying map and consisted of about one squadron of cavalry and about two regiments of infantry. This force was seen about 8:52 A. M.

Due to the haze in the air it was possible to see only a small area immediately below the machine and the exact position of this area with reference to the rest of the map is rather difficult to locate. Altitude was about 2,500 feet. On account of this haze it was also difficult to determine the size of the bodies and the character of the troops. A discarded camp marked "C," of about one regiment of infantry was noticed on the east side of the Housatonic River just southeast of Zoar Bridge and also one northwest of Berkshire.

A wagon train of about twenty wagons with an escort of about one company of infantry was seen moving northeast on the road to Derby and at a point marked "D" on the accompanying map.

An automobile believed to be that of the Chief Umpire was seen on Berkshire road, evidently moving northwest towards Berkshire at a point almost "S" on the map.

Report of aeroplane reconnaissance August 13, 1912, by First Lieutenant B. D. Foulois, Seventh Infantry.

Left camp 8:58 A. M., returned to camp 10:28 A. M. Maximum altitude 2,927 feet.

Proceeded to Zoar Bridge via Shelton thence via Shelton and Housatonic River. No troops observed between Stratford and Derby other than a small wagon train of about ten wagons marching north towards Shelton on Nickel's Farm Shelton Road. No troops observed between Shelton and Zoar Bridge. Hospital detachment observed in camp at Zoar Bridge on east side of river. Another small detachment, evidently of the Hospital Corps stationed at Stephenson.

At about 9:45 A. M. a small mounted detachment was observed passing back and forth on the Zoar Bridge-Berkshire

Road. At the same time a large force of infantry, estimated strength one brigade, was observed in line of battle on the south side of the Zoar Bridge-Berkshire Road and about a half mile east of the cross road marked "A." About a half a mile north of the infantry position a small group of horses and vehicles were observed, but due to the haze it was impossible to accurately determine the character of these troops. On the left flank of the main body of infantry, south of Hill 745, a small body of mounted men was observed. Near cross roads marked "A" another small detachment of mounted troops was seen. After circling over the troops in position east of cross roads "A," reconnaissance was continued to Berkshire and Sandy Hook. At 9:50 a wagon train accompanied by a small detachment of mounted men was seen moving south of the Berkshire-Cold Spring Road.

The train it is estimated contained about twenty wagons. No troops were observed in the vicinity of Berkshire or Sandy Hook. While passing over the forest between Berkshire-Cold Spring Road, marked "A" and "B" on the map, several mounted men were observed near the edge of this forest. Reconnaissance was continued south on the Sandy Hook-Cold Spring-Monroe Road. At about 10:00 A. M a detachment of dismounted troops, estimated strength about one hundred, was observed in the railroad cut south of Hill 745. At the cross roads northwest of this cut a small detachment of men and horses was observed. Reconnaissance was then continued towards Botsford and Huntingham but no other troops were observed.

During the entire reconnaissance experimental tests with the aeroplane wireless set were being constantly made. Upon returning to the headquarters camp it was learned that the signals from the machine were distinctly heard when the machine was in the vicinity of Zoar Bridge. No attempt was made to send complete messages as it was found that further adjustment was still necessary to properly tune the aeroplane wireless set and alternating current generator.

Report of Private B. Havens, August 13, 1912.

Left 10:34, returned 10:43. Maximum altitude about 1,500 feet. Flew north on Housatonic River to Long Hill circling back over Camp Lee, thence to New York, New Haven Railroad bridge, from which point two companies of infantry were observed to rest on the Stratford-Milford Road west of the wagon bridge and three troops of cavalry were seen approaching on the east side of the bridge. Several officers were seen proceeding north on the Stratford-Long Hill Road just north of the N. Y., N. H. tracks.

Report of reconnaissance made by Lieutenant Foulois, August 14, 1912.

Left camp at 8:34 A. M. Proceeded north to a point one mile south of Huntington, traveling at an altitude of 1,500 feet, due to fog and mist. At about 9:00 A. M. observed small detachment of troops (dismounted) at point marked "A." about one mile south of Huntington. While observing these troops, the aeroplane motor developed trouble and an immediate landing was necessary. The entire terrain within the safe aeroplane area was very rough and heavily wooded. The only landing place visible was a small ploughed field about seventy-five yards long by twenty-five yards wide, surrounded by trees and stone wall and scattered trees on the fourth side. The limited area and unfavorable surroundings made it necessary to make a short, sharp landing to avoid running into the stone walls. The landing was safely made, but the sudden checking of the machine snapped two of the front skid braces. Upon making the landing I entered the house on the edge of the field (owned by Mr. Botsford), telephoned my information to headquarters camp at Stratford, and requested that transportation be sent out to bring the machine back to headquarters camp.

The damage to the aeroplane could have been repaired on the spot in an hour's time, but due to the limited area of the field and unfavorable surroundings, it was absolutely impossible to fly out of the field without hitting some obstacle.

Report of Lieutenant B. D. Foulis, August 17, 1912.

Left camp at 6:20 A. M.. I struck cross wind at altitude of 3,000 feet, with big drift to westward, carrying me out of course. Landed at Bretnin, N. Y., at 7:20 A. M. to locate myself. Left ground at 7:30 A. M. arrived at Bethel 7:55 A. M. Reported to Commanding General Blue Division for orders.

Ordered to scout northeast to Hawleyville, southeast around Taunton-Pond-Newton-Berkshire-Cold-Spring. To report upon disposition and movements of the Red force.

Left Blue headquarters camp at 8:35 A. M. Scouted to Hawleyville-Newton and south and west to Taunton Hill. Located one regiment of cavalry about one mile northwest of Newton, approximately two brigades of infantry entering Newton from the direction of Sandy Hook, two or three batteries of Field Artillery in western outskirts of Newton overlooking Taunton Pond. Returned to Blue headquarters on Taunton Hill at 9:15 A. M. and reported result of reconnaissance to General Mills, Blue commander.

General Mills then moved his headquarters to Newton Inn.

At 10:50 A. M. made another reconnaissance over both forces at altitude of 2,000 feet. Observed Red troops covering entire Blue front and enveloping Blue right flank with infantry, both lines at 11 A. M. being only 400 yards apart. Landed near Newton Inn at 11:10 A. M. Reported observations to Captain Hallahan, Signal Corps, N. Y. N. G, who transmitted report to Blue Commander.

About 11:20 A. M. the Blue force retreated to ridge east of Taunton Pond, and being without assistance to move the aeroplane, I was taken prisoner by the Second Connecticut National Guard. At 12:10 A. M. I left Newton Inn enroute to headquarters camp near Stratford. Arrived at 12:35 P. M.

Total time in flight two hours fifty minutes.

Report of Lieutenant Harry Graham.

In compliance to your verbal request I have the honor to submit the following recommendations in reference to the needs of the Aviation Squadron in the field, as shown in the recent maneuvers near Bridgeport, Connecticut:

Aeroplanes:—Not of sufficient power to carry pilot and observer and should be fitted with powerful brakes for quick stopping in a country having but few good places for landings.

Engines:—Practically the only engines known to the Aviation Squadron are the Curtiss and the Wright.

During the maneuvers and also at College Park the former have repeatedly and almost constantly been in trouble, and while the latter are not perfect by any means, the Wright machines could almost always be counted upon to fulfill almost every demand made upon them.

But *real* military aviation work must necessarily be cross-country, which needs above all an engine that *never stops* except at the will of the pilot.

We have no opportunity of testing engines of other manufacturers, either domestic or foreign, and I urgently recommend that steps be taken at once for a thorough test of all standard makes, both revolving and reciprocating, in order that we may secure the very best obtainable.

In my opinion the former class of engines (revolving air cooled) will ultimately be installed on all flying machines.

Trucks:—Engines should be of fifty instead of thirty horse power. The weight of body of our present truck could be materially reduced without sacrificing necessary strength.

Equipment:—Each machine should be assigned to an officer who would be held personally responsible that the machine was at all times ready for instant use, and that the necessary spare parts were always on hand for repairs.

A record book of each machine should be kept by the officer in charge showing instruments and the spare parts on hand and date of expenditure of latter.

Personnel:—Extreme care should be taken in selecting the enlisted men assigned to the machines, as a single careless piece of work on their part endangers the lives of the pilots.

This was most recently shown in the maneuvers when the gasoline intake tube on the Burgess-Wright became detached at an altitude of 1,500 feet, causing a forced landing in a country where it was extremely hazardous. The non-commissioned officer in charge of each machine should be tried for criminal carelessness by a general court-martial in every case when it

can be proven a thorough examination by him could have prevented the accident.

Selection of ground for aviation camps and landings at maneuvers:—Had an officer experienced in such work accompanied the engineers in selecting camps, many much better places for the aviation camp could have been selected, and also favorable landing places noted for use in emergency during the progress of the maneuvers.

Report of Lieutenant Roy C. Kirtland, August 17, 1912.

In compliance with your verbal instructions this date, I have the honor to submit the following report upon the operations of the Aviation Squadron at the Connecticut maneuvers:

Because of the fact that I did not report at Division Headquarters until August 14th, I had the opportunity of observing but three days work. During that time, however, I was thrown in contact with several commanders and their staffs, and was given an excellent opportunity to observe the lack of co-ordination between the several headquarters and the Aviation Squadron.

Due to the fact that a great many officers are naturally unacquainted with aerolpane and the possibilities of aerial reconnaissance it is not surprising that the necessity of establishing good landing places near the several headquarters and for providing transportation for the aviator to the commanders was not thought of.

The remedy for this lies in attaching to each headquarters an officer of the Aviation Squadron. This officer should be a regular member of the commander's staff. He should be a qualified aviator so as to recognize at once all open places suitable for landing and parking aeroplanes. Such places when selected by the aviator should be set aside for aerial use solely; keeping in mind firstly, that the aviator should be enabled to land from any direction without danger to himself or his machine; secondly, that he should be provided with automobile or horse for quick transportation to headquarters, and thirdly, that he should be enabled to leave the ground in any direction.

The selection of grounds for camping should be secondary to that of aviation, as few fields are naturally good aviation fields, while on the other hand many open places can be used for camping purposes, to illustrate: You may camp in comfort in a field studded with stumps, bushes or rocks, while such a field is wholly unsuited to aviation use.

The aero-staff officer should be required to make a careful reconnaissance of all territory in his vicinity for the presence of available emergency landing places. Such places should be accurately located on a map so that the aerial scout may be informed of their location, size and general suitability.

Such officer should be provided with a small powerful auto in order that he may not only make his reconnaissance but keep in touch with his commander and the scout. The prompt transmission of messages from scout to commander is of vital importance.

When a section of the aero squadron is directly attached to a command, its senior officer will act in place of the aero-staff officer referred to above and all the section officers can make the reconnaissance required.

The motor truck for use in carrying oil, gas, and spare parts for aeroplane should be of lighter construction than the one now supplied to the Aviation Squadron and it should be equipped with an engine of at least forty horse power. The present truck (thirty horse power) is much too weak for effective use, even on good roads.

The aeroplanes in use were all underpowered and as a consequence but one scout could use them at a time, and while, in good weather one person can both manage the machine and observe, in dusty winds the operator has little time to do anything but manage his plane.

All aeroplanes should be capable of carrying two men and have plenty of excess power in order that sufficient carrying power may be had even though the engine not be delivering full power. This excess power will always be useful in arising from poor or small fields.

In order that the Aviation Squadron may properly take care of the several machines and the great amount of impediment necessary therefor, each plane should be supplied with a

crew of five men of the following grades: One sergeant, one corporal, two privates, first class, and one private, second class.

Each group of three or four machines should have one supply officer and one or more supply sergeants. This officer need not be a flyer.

Report of Lieutenant Harold Geiger, August 17, 1912.

Persuant to verbal orders this date, I have the honor to submit the following report on aviation in connection with the Connecticut maneuvers, of August 10-19, 1912.

I left Washington, D. C., on August 8th, for Bridgeport, Connecticut, arriving there at 4:45 P. M., the same day. I remained on duty there until Sunday, 12:25 A. M., August 18, 1912. While there I acted as Quartermaster of the Aviation Squadron, Recorder and also Observer for Curtiss No. 1 machine. Owing to the limited size of the aviation field the weather conditions and the fact that the Curtiss No. 1 machine did not have the power to carry two persons for military purposes, I was unable to do any duty as an observer while at the maneuvers.

As a result of my experience at the maneuvers, I would respectfully recommend the following:

First.—That all available military aviators devote their time to study and experimentation in military reconnaissance.

Second.—That immediate steps be taken to develop an efficient wireless equipment, and after that has been done, that each aeroplane be equipped with the same.

Third.—That different types of foreign and American motors be tested at College Park, with a view of obtaining the most efficient type of motor for military aeroplanes.

Fourth.—That sufficient aeroplanes be provided in order that there will be at maneuvers, two machines for each military aviator and observer, and that not less than ten aeroplanes be sent to maneuvers.

Fifth.—That an officer who is not an aviator be detailed as Quartermaster of the Aviation Squadron; that a non-com-

missioned officer be detailed as Property and Quartermaster Sergeant and be relieved from all other duties.

Sixth.—That the enlisted personnel of the Aviation Squadron be increased so as to provide two non-commissioned officers and four privates for each machine.

Seventh.—That the ranking non-commissioned officer of each detachment be sent to the factory where the engine of his machine is constructed, to learn the construction and regulation of the motor.

Report of Lieutenant T. D. Milling.

In compliance with your instructions, I have the honor to submit the following report of my observations of recent maneuvers held in Connecticut:

The country over which the maneuvers took place was very unfavorable for the use of machines as it was thickly wooded, densely populated and very hilly and rocky. However, if flying at a proper height, it was possible to make forced landings without serious danger to the operator. The field used by machines for starting and landing was enclosed on two sides by tents and on one end by very high trees. This made it possible to get away in only one direction. The prevailing winds usually varied from southeast to southwest, consequently most of the get-aways had to be made with the wind on your back. The dangers incident to a field of this kind were clearly evident if the machine used is not of sufficiently high power to carry a passenger either with or against the wind, as was illustrated in one flight in which I attempted to carry a passenger and succeeded in clearing a stone wall immediately in front by only a few inches. This shows the necessity for having the field sufficiently large and open to get away or land in any direction.

The machine that I used in the maneuvers was a double-controlled Curtiss which was delivered to the Government last February and was constructed and designed especially for this work to carry a passenger. While it may have been possible under the most ideal conditions to have carried a passenger on the machine, it was found under the average conditions I en-

countered, impossible to use an observer, consequently I had to make my own observations in addition to operating the machine. This made it impossible to make sketches, take notes, or use a field glass, and the information gathered was not as accurate as regards details as could have been obtained had an observer been carried. However, even under these disadvantages, I understood from the staff of the Chief Umpire, that the information as a whole was fairly accurate. During the last two days of the maneuvers, my motor gave me trouble and I was unable to use the machine. Up to that time I made two observations flights of approximately forty-nine and fifty-seven minutes each, and in addition had made numerous trial flights ranging from five to twenty-five minutes. The information gained in the two long flights above mentioned consisted in locating the position of camps, the location of troops both in camp, at halt on the roads and in movement in column along the roads. I was able to determine the formation taken by the troops and with the use of the map carried on the machine to locate the positions on the map after landing. Some of this work was done early in the morning and at that time the air was very hazy, it being possible to see only the area directly beneath the machine. On account of this it was necessary to steer entirely by compass. The compass I used was the type ordinarily found on ships, though much smaller and lighter, and it proved eminently satisfactory.

There is no provision made on the Curtiss or Wright machines for carrying maps, pads, etc., and I believe that the observations could be made much more accurately if the machines were equipped with enclosed bodies which would protect the operator and observer from the wind, thus giving him free use to make notes, plot positions and draw sketches.

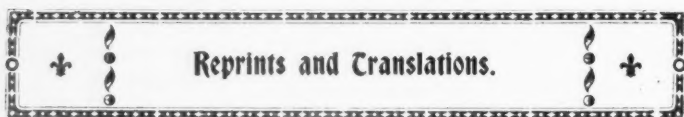
If machines were attached to troops it would be impossible to have a landing and starting field always near headquarters. It would be necessary, therefore, for some officer who is familiar with the kind of ground needed for the use of aeroplanes, to be on hand when such a camp is selected. There will probably arise numerous cases in which the field may be some distance from headquarters. In this case a small motor car or motor cycle should be provided so that the aviator immediately after

landing with his information can communicate without delay to the commanding officer.

There was used during these maneuvers one motor truck equipped with a splendidly designed body and of thirty horse power. From observations of work done by this truck, I believe it would be better to have one of lighter weight and equipped with a forty horse power instead of a thirty horse power. It will also be absolutely necessary that there be one motor truck to each machine. There will arise cases where a machine will be forced to land some distance from camp and a motor truck will then be put into use to carry spare parts for the repair of the machine on the ground or to tow the machine back to camp. This truck should carry a small amount of the most necessary spare parts. There should also be one truck to each two machines to carry additional spare parts not carried on the first truck. It would also be necessary to have one truck to each company equipped as a work shop, with forge, lathe, etc., to do repair work in the field.

It is a very difficult matter to make tents sufficiently large and still light enough to pay for their use as tent hangars while in the field. Therefore, I believe that except in the case of permanent camps it would be better to simply cover the engine and stake the machine down.

From the experience of the officer who acted as quartermaster or supply officer, I don't believe it would be possible for an officer to fly and at the same time attempt to do this work. The officer who has this work should not be a flier himself. This would be more necessary when the machines are equipped with the necessary number of trucks and spare parts.



STUDIES IN MINOR TACTICS.*

THE ABORTIVE ATTACK ON MOSBY, APRIL 1, 1863.

BY "A. F. B. D."

"Local protection can never be dispensed with."—"Field Service Regulations," ch. v. p. 75.

"Surprised by a superior force, an ordinary man occupying a bad position would seek safety in retreat; but a good commander will put a bold face on it and march to meet the foe. By such action he disconcerts his opponent, and if the latter shows any irresolution in his march, a skilful leader, profiting by his moment of indecision, may even hope for victory."—NAPOLEON.

GENERAL SITUATION.

THE Armies of the Potomac and of Northern Virginia, facing each other on opposite banks of the Rappahannock, were preparing themselves for the next great trial of strength at Chancellorsville. Captain John S. Mosby, C. S. A., had arrived in the vicinity of Middl. burg and Aldie at the end of January, and since then, with his band of guerillas, had been causing much trouble to the far larger force of Federals, under Major-General Stahl, who were guarding the approaches to Washington.

THE ATTACK

On the 31st of March, Mosby, who had collected a force of sixty-nine men, all well mounted, courageous, and knowing the

*Reprinted from the *United Service Magazine*, (British), of September, 1912.

country, set off from Aldie down the Little River turnpike towards Fairfax Court House. Turning off from this road near Ox Hill, he struck away cross country towards Dranesville; here he hoped to get in the rear of several strong posts cantoned in that neighborhood and make some extensive captures, as he had so often done in the past two months. The terror of his name, however, had grown so great and inspired his foe with so much caution that, on arrival at the places appointed for the new exploit, the birds were seen to have flown. All the pickets had gone back some ten miles in the direction of the capital, and were now ensconced in perfect security behind a swampy stream, well named Difficult Run. Here they had erected the most intricate entanglements and entrenchments, rendering attack an almost hopeless task.

The effects the disappointed Confederate commander learned from the dwellers in the vicinity, all of whom were friendly to his cause. The sun had long since sunk below the far line of the Blue Ridge, and rain had set in heavily. Mosby resolved then to abandon his enterprise, or at least to postpone it till the next day; his little band turned their backs on Washington, and riding some eight miles up the road from Alexandria, broke off to the right and made their way to a farm-house, owned by one Miskel. Here Mosby knew that rest and refreshment for man and beast could be readily procured. Nor was he disappointed; his horses after being fed and watered, were tethered in a row to the fence surrounding the two buildings of the farm, in which the troopers lay down to sleep. By 11 P. M. every one had settled down for the night's rest.

The position of Miskel's house was tactically vicious. It was half a mile south of the Potomac, across which Federal troops were camped. West of it, and still closer, the waters of Broad Run, swollen by the rain, cut off all escape on that side. The house itself stood on rising ground and consisted, as already mentioned of a dwelling house and barn, surrounded by a high board fence; south of it, before one comes to the road, extends first a broad stretch of cultivated ground, and next to this, separated from it by another fence, a strip of woodland, running to the pike and some little distance along it. A field road leads from the highway to the farm, bordered on

it right-hand side, from the point where it emerges into the open plough through a gate, by a stiff wire fence. A third fence and gate separate the main road from the wood.

The terrible weather, rain and snow in great gusts, as well as the lateness of the hour, induced Mosby not to put out the usual pickets and sentries, but to content himself with setting one man only on duty near the barn.

We have said a few minutes ago that all the inhabitants of the country favored the raiders. This is not quite true; at any rate, it seems fairly clear that it was a woman, living near Herndon's Station, who, seeing the party pass her door *en route* for the northwest, counted their numbers, noted their position, and rode off in haste to the nearest Federal post, the headquarters of the First Vermont Cavalry, at Union Church, beyond Difficult Run, where she lodged her information.

The First Vermont Cavalry was one of the best regiments in the Federal Service, and were already smarting from defeats inflicted on their scattered posts by the famous partisan leader. The major in command had no hesitation, therefore, as to the advisability of seizing such a priceless chance of disposing of their audacious foe. One Captain Flint was given the command of 150 picked men whom he divided into two squadrons, one of men armed with pistols, the other of swordsmen and carabiniers; with these he set off, light-heartedly expressing his intention of "giving Mosby an April fool that morning."

Flint rode so hard that he had almost covered the twenty miles or more that separated him from his objective before the first blush of dawn. Following up the right bank of Broad Run he passed, unnoticed, a small house belonging to a Mr. Green, in which, as luck would have it, one of the Confederates had been spending the night. Aroused by the clatter of hoofs, this man gazed out of the window at the cavalcade pressing on in the direction of Miskel's, and realized at once the immediate peril of his comrades. Dashing down stairs and flinging himself on his horse he set off at a tearing gallop across country, hoping that he might possibly succeed in giving warning to Mosby before the advent of the blue troopers.

Meanwhile at Miskel's the night had passed quietly and

the sun had just risen, when the Confederate Captain strolling out into the clear, still air of the morning, saw the messenger galloping towards him and shouting out with the full power of his lungs: "Turn out! turn out! the Yankees are coming!" In an instant all the courtyard was alive with the confused uproar of men aroused with a start, and still half dazed from their slumbers, to face a sudden and terrible danger. Some of them had been already astir before the alarm and were now feeding their horses; these straightway began hurriedly to prepare for action; most, however, had not even time to saddle up before the enemy appeared but a short distance off, coming resolutely on and in apparently overwhelming numbers.

Flint had passed off the road and into the wood with his whole force, and leaving behind a few men to block the opening with some kind of obstruction, hurried on towards the house. The pistol squadron led, and dashing through the second gate extended out on both sides of the track into the plough land, throwing forward its wings so as to surround the farm on all sides and cut off any escape. As the men came on they delivered a rapid fire of small arms against the crowd of Confederates thronging the courtyard. The effect, spite of the excellent target, seems to have been absolutely nil; and those of Mosby's men who had their rifles ready replied with more success. The gallant Flint fell a victim to these, the first shots of the day.

Mosby, with the eye of a born leader, saw his chance and took it. Rushing from the gate with about a score of brave followers, he hurled himself against the Federal right wing, the nearest of the two to the buildings. His men streamed out after him, yelling furiously, one by one, just as they could get mounted. The vigorous and unexpected onslaught proving to the astonished enemy that this was no parcel of sheep but a swarm of very angry wasps that they had disturbed, met with the most astounding success. The Federal front line was shattered to fragments and hurled back on its supporting squadron; seized with panic, the whole gave way in terror, and going about, fled in wild confusion over into the woods, the partisans hard at their heels. Arrived at the barrier thrown up at the exit on to the road, there ensued a frightful spectacle, a regular jam

of squealing, kicking horses and cursing riders, mad with fear, seeking only to escape from their dreaded pursuers, who were, almost unresisted, hacking away at the edge of the helpless mass. At last the obstruction was broken through and the Federals scattered in all directions, followed still by their persistent foes. Some of them were chased for nearly ten miles, right beyond Dranesville, before the Confederates drew rein. Part of the Vermonters who had not followed the flight of their fellows, but had turned the farm on the left, hoping to escape that way, got shut up in the cul-de-sac formed by the Potomac and Broad Runs and fell, almost without resistance into the hands of Mosby.

The losses of the vanquished were very heavy. Ten men, including the commander, were killed, fifteen wounded severely, and eighty-three, including two officers, were compelled to surrender at discretion; ninety-five horses were also captured. This brilliant result was gained at the trifling cost to Mosby's band of one man killed and three wounded.

COMMENTS.

One often reads in military history, of a force surprised by a far weaker body of the enemy, yielding almost without resistance, and affording to the inferior foe a striking triumph. Such, for instance, was the attack of Vigneulles sur Montmedy, in 1870. But I fancy that the above incident is almost unique of its kind. For a far smaller body, surprised at dawn and assailed by a twofold superiority of numbers and under the most disadvantageous conditions, not merely to extricate itself from the trap but utterly to route and inflict heavy loss on its enemy in open fight, is an achievement which certainly deserves to be closely studied. Let us examine it, then, with an eye to future lessons.

Firstly, it cannot be denied that, as Mosby himself very frankly says, he had taken insufficient precautions against surprise. He advances as excuses for this dereliction (1) that he only reached his resting place at 10 p. m.; (2) that the men and horses, after riding forty miles that day, through snow and mud, were nearly broken down; (3) that the enemy had fallen back eighteen miles; and he might have added a fourth, namely,

that his troops consisting largely of irregulars and adventurous civilians, he could not have so much control over them as would be possible for an officer of disciplined troops.

None of these four facts excuse the lack of precaution, though they may very well account for it. Mosby himself was as well aware of this as any one, and he could not have disguised from his own mind the truth that—more fortunate than Morgan at Lebanon he had only escaped disaster by two pieces of great good luck. "Every officer who allows himself to be surprised deserves to be relieved of his command," so runs the old maxim, emphasizing the fact that a failure to take full measure of security is the worst of military blunders, and that, while no officer should demand undue exertion from his men, still less has he the right, for any reason whatever, to run even the remotest risk of sacrificing their lives and liberties through neglect of essential precautions.

The fact that here the full penalty was averted, Mosby had to attribute, as we have said, largely to the interposition of fortune. It was fortune in a sense, that brought the peril upon him; but it was also fortune that turned it aside. If but for the action of the woman, who brought information to the Vermonsters, these would have slept on unaware of their opportunity; it must also be said that the accident of one of the men having—in defiance, be it noted, of military discipline—lodged behind on the road by which the attack came, and also the fact that this man possessed a good share of decision and courage—qualities the absence or presence of which may turn the scale in war even if their possessor be the humblest soldier in the army—gave Mosby just that fraction of time without which the whole force must have been captured in their beds. For so much may count the intelligent action of even one solitary trooper!

The second piece of good fortune was the insufficiency of the dispositions adopted by the enemy. Flint—a very able officer beyond all doubt—would have done better, in all probability, if he had gone a little less hastily. An officer nowadays with a similar task before him, would surround the house first with dismounted men, ordering them to command the exits and shoot down every foe who showed himself, while the rest

pushed on preferably on foot, in order to force an entry covered by the fire of their comrades. The affair would have taken longer, but the result would have been more certain. As it was, half of Flint's force never got into action; its share in the fight was confined to running away from it, and this simply because, bunched in a restricted space where no one of them could use their weapons, or even get at the enemy, they were swept off by their foremost comrades flying from a foe, who at the point of contact, brought a more numerous force to bear. Flint's dispositions, in a word, were such as to surrender to his opponents his own great advantage of superiority of numbers.

One may pause to note the remarkable feeble effect of pistol fire from the saddle. This was not the only instance of such a thing in this war. Were the Vermonters, we wonder, insufficiently trained in this sort of fire, or can it be that effective shooting from horseback is less easy than Mr. Childers and his partisans seem to consider it?

When all has been said, however, the fact remains that it was the nerve and decision of the Confederate leader that proved itself the decisive factor. Without that the errors of his foes must have passed unpunished, probably unnoticed. The characteristics of the born soldier, so clearly shown here, are not to be implanted in the mind by any amount of study, but he who has them in him and knows how to use them may often get himself out of predicaments in which others would flounder hopelessly. Mosby on this occasion, by his well-timed and vigorous assault and by the fire of his personal example, snatched from his foes their two great advantages, those of superior numbers and of surprise, and seizing them for himself, used them with such good effect that he gained a most glorious victory at a cost absolutely infinitesimal. This goes far to redeem his previous error, and to emphasize the fact, so often insisted on already, that it is the moral that ever holds the day over the physical; that in war men are nothing, a *man* is everything.

LET US HAVE A CHIEF.*

IT sometimes happens that in the quiet and security of a long peace or in the enthusiasm of victories too easily gained, people and their governments lose interest in military affairs and neglect their armies, this without regarding the progress that is being made by their more prudent neighbors across the frontiers. But nothing of this kind has occurred in France since 1870. Forty years have passed without even an alarm of a great European war, and still military questions are more than ever the order of the day. The army follows out its courses of evolution without hinderance, taking the initiative and making changes based upon the progress of science and tactics, or else such as are imposed on it through the necessity of conforming to new conditions of existence to which it must adapt itself arising from new developments in social life, new combinations, and new phases of politics.

Thus the laws which are enacted from time to time tend to increase its material powers, or they bring it face to face with new difficulties, or else they cause excessive stimulation of its vital energies. But to whatever class these laws may happen to belong, whether they be clearly suited to meet the needs of the army or whether they be marked by hostility to it, they are still evidence of the interest which the nation is devoting to questions concerning military affairs. Repairs are not made to abandoned houses, nor does anyone combat a dead religion. Even the violent attacks of the anti-military agitators are not without their desirable and useful results; they arouse the good sense of the masses of the people and they oblige the army itself to keep up to a high standard in self defence.

It seems that the different currents which agitate the military profession have recently acquired new force. We are on the eve of transformations comparable to those affected in 1875, the time of the reorganization of the army. Among such

*From the *Revue de Cavallerie* (French) of April, 1912. Translated for the War College Division of the General Staff by Captain W. H. PAINE, Fourteenth Cavalry.

changes are likely to be the reconstruction of the corps of officers and field troops, alterations in the methods of recruitment and advancement of officers, the development of the higher military studies, etc. It is not politics that has furnished the impetus for these things but it is due to interest in the army and to the experience of recent wars.

However, it is certain that the ancient structure of the army will continue to the general form and features which have become consecrated through long usage. The infantry is going to remain the queen of the battlefield, with its power increased by the utilization of improved weapons, an appropriate system of tactics, and a judicious employment of reserves. The artillery is to be the servant of the infantry. It is provided with cannon which work with the precision of the finest machine tools. We are not unaware of the esteem which it has acquired in the popular opinion which is too much inclined to lose sight of the importance of the purely human elements. The fact is that it has profited from this by strengthening its status and by securing the assignment to its branch of service in the organization law of 1909 of an increased proportion of the whole army, a proportion such that the question might be raised as to whether or not it might even become an encumbrance. And since we are at the subject of engines and appliances let us join the popular fashion of favoring the development, which is without doubt excessive of all the accessories, telegraph systems, balloons and all sorts of vehicles. As for the cavalry, which has accomplished a very great progress in instruction in matters of detail and in the employment of its capacities for reconnaissance, and which has met with wonderful success in the solution of the problem of making cavalymen in two years' training, a problem in which success in the solution seemed impossible, the cavalry is maintained at about the same proportionate strength, atleast in appearance, although slightly diminished in numbers, since it is indeed necessary to take from some place the men whom it is desired to place somewhere else.

We know the theories which have been so ardently proclaimed that the cavalry is an archaic arm, that it is without utility in modern warfare, and that it would be doomed either to inaction or else to certain destruction in the presence of a

line of rifles or a few cannon. But it does not appear that its detractors, and many such have arisen in the highest stations, have dared to abolish it or to reduce it to a few groups of scouts. The reason for this is that these persons are not at heart so thoroughly convinced as they wish to make it appear that they are. The history of cavalry of former times which in every state of armament found it possible to make so many valuable interventions in battle or campaign, and to perform so many exploits; the tendencies of the Germans whose ideas find so much favor among us, a favor which it must be admitted is often deserved because of their objective and practical value; the experience, negative indeed, but still quite conclusive, which was drawn from the South African and the Manchurian wars; the perfect accordance which exists between the means and methods suitable to cavalry and the characteristics of the French race—the "*furia française*"—these considerations, with possibly some others, have served to raise some doubts in the minds most hostile to the cavalry. They have feared to yield to the reasons that have been so skillfully supported by some parties or to the calculations which have been made by others. The cavalry still lives.

However, there appeared to be beautiful opportunities for the opponents of the unfortunate cavalry. While the infantry, which is the army itself, was accomplishing regular progress along lines that were recognized and accepted by all, and with no thought on the part of anyone of menacing it; while the artillery devoted its efforts toward securing a preponderant situation and secured its chief to suit its purposes, the cavalry was losing ground little by little, with its unity of doctrine, and its faith in itself. It found itself in no position to make any reply, either by its deeds or by an authoritative voice, to those who were proclaiming that its opportunities for usefulness were on the decline. Its higher officers were no longer consulted, and the truth was that their opinions on fundamental questions were different in case it happened that they had any opinions at all. At maneuvers the cavalry was rewarded with justly earned commendation for its services in securing information, but when it came to the combat, even the umpires who were the most friendly disposed, were unable to do more than praise

in florid language the picturesqueness of the chargers of our "little chasseurs" while as to their tactical effect they maintained a silence filled with meaning. After their æsthetic emotions had cooled down they became the opponents of an arm of the service which seemed to them to no longer possess any offensive power. And when this came to pass who was there to undertake the defense of the cavalry? Was it the General Staff of the army? But the cavalry there are few in number and the virtues which are specially pertinent to our branch of the service are the ones which flourish the least in the War Department Bureaus. Was it the "Direction" branch of the War Department? Their duties, already sufficiently burdensome to not include this. Was it the Committee Board of the War Department? It has long been dead and is now about to be buried. Was it the Superior War Council? It is said that the debates there are determined by votes and only two cavalry men have ever been seen there.

The cavalry, in view of all this, may thank its own good luck that it is not dead. But it is time for it to lead a less precarious existence, and it ought to become fully conscious of the powers for shock action which it possesses. We solemnly assert that its golden book is not yet closed. One hundred years ago the German squadrons were flying before us over all the routes of Europe. Why are they worth more than our own today? And however powerful small arms and cannon may have become must they not always be handled by men with human weaknesses of mind and spirit and who may some day be placed at our mercy through surprise, fear, or mental or physical fatigue? Are we no longer capable of sacrificing ourselves for the salvation of the army? Would it no longer be counted anything to save nothing but honor as at Sedan? But if we would acquire the favor of all these little parliaments, which is what the bureaus, committees and councils really are, and should this favor condescend to assure us of the right of existence it would still be sufficient. Assemblies or collective bodies are unable to give anything but hesitating impulses, they are bound to vacillate between the different individual ideas of their members. They are lacking in determination, their enthusiasm is intermittent, and their control is inefficient. The circulars are

sometimes well prepared; a new set of regulations is desirable. But it is not on paper that men are handled. What is it that we need to arouse our energies and to unite and direct our efforts? It is a mind and a soul? We are now a body without a soul. We need a chief.

* * *

Now, is this an excessive request or is this need a new one? Quite the contrary. History acquaints us along with the record of all cavalry forces of which the memory has been preserved, the names of the men who have trained them. With a cavalry force a high morale and a proper spirit are almost everything. The conditions favorable to the best life of the cavalry are, a correct organization, horses of good endurance, arms of precision, units well instructed, and the best obtainable drill regulations. But the creative spark for all these is the intelligence of the chief. Without going back to the time of of the Deluge for proofs of this assertion we can cite the Prussian cavalry which was victorious at Rossbach, then sunk to the condition seen at Jena, and again revived under Blucher and the Wrangels. And what lessons are offered by the recent history of our own cavalry? They are known to all the world, even there may be some appearance of their having been forgotten.

After 1870 the cavalry, along with the rest of the army, had to be reorganized. During the campaigns it had, it is true, preserved its honor in several encounters but in no instance did its action prove to be very efficient nor can it be said to have been profitable. Its fine evolutions by squares not having found any place on the field of battle it remained inert and useless at the rear of the columns. At the end of the war it found itself without organization, without tactics and without confidence. At the time of the colossal regeneration that stirred the entire nation, the cavalry was not lacking in officers who were disposed to consecrate to it their intelligence and their energy. But among these laborers for the first hour there was a chaos of opinions out of which arose some ardent rivalries. There was indeed among them one voice of especial authority, one temperament of a chief, but General du Barail was not clothed

with the necessary authority. From the concourse of good intentions without discipline there could only come forth works that were uncertain, timid and without unity. Such was the organic law of 1875 with its regrettable division of the cavalry into independent divisions and corps brigades and the incomplete drill regulations of 1876.

But if it was a long time before anyone undertook the task of revising the work of the legislators there was at least no long delay before the regulations of 1876 received attention with a view to their improvement. However, under impulsion of the man who was to preside over the destinies of the French cavalry for several years the faults of these regulations were not of a nature to impair the dash and spirit in the troops, and it is permissible to believe the modified regulations of 1882 were in some degree in the mind of their author a testament which was to assume its true value when he should be no more. However that may have been, until the coming of the man who could infuse animation there was nothing more than the definitions and documents without efficacious virtues and they were in the hands of a personnel without convictions. Tactics must be created and above all endowed with spirit.

General de Galliffet became inspector-general of cavalry in 1879, at the conclusion of the cavalry maneuvers at Brie which he directed and which excited an immense interest throughout all the armies of Europe. If the minister exhibited no special merit in this selection of a general who united the most brilliant qualities of a chief with the prestige gained from the proofs of an admirable bravery shown upon all the battlefields, he did at least exhibit the merit of comprehending that the cavalry was in need of a chief, and he had the courage to give it one. He rendered this arm of the service an immense benefit which merits recognition, both by reason of the progress accomplished at that time and also by reason of the principle established. Through rare and inestimable good fortune the chief thus placed at the head of the cavalry at the time of the reorganization of its material and moral forces was the most remarkable cavalry trainer who ever existed. From a doctrinal point of view the particular work General Galliffet was to condemn the tactics of small fractions and to inaugurate that of large

masses. Under him the cavalry was taught to quit the baggage train of the infantry, move out into the country, apply itself to the attack of the hostile cavalry in order to destroy it, push its own proper reconnaissance up to contact points, and then offer its powers for shock action to be placed at the disposition of the commander of the army. These methods, although they may have appeared new to the French cavalry at that time, were the very same ones which had succeeded so well in all the wars of the First Empire. If clearly planned and energetically executed they will again succeed. With these methods confidence again appeared. The hearts of the cavalry were elated by the memories of Lasalle and Murat, and that voice which had maintained the courage of the troopers of Illy in the most frightful rout, being able to promise and make good, "As many as you need, general, so long as there is one remaining." And the material indications of good order, rapidity, definite objectives in evolutions, all showed that the cavalry had but a single head and but a single soul.

It should also be stated that General Galliffet knew how to choose his assistants and how to impress willing services at need. He insisted that the divisions, brigades and regiments should be commanded by active cavalymen, men of clear thought and decided temperament. He proceeded to make the necessary amputations. He compelled the retirement of officers who had become physically and morally superannuated in the childish game of the execution of evolutions which were without any practical object or in the details of some exclusively interior service. Often these were brave soldiers who had rendered long and loyal services, and some of them were interesting men by reason of their family connections, but nevertheless they were only dead weights in positions where living forces were required. This corps of officers who had lately been vegetating in indifference and discouragement became the most active and the most enthusiastic that the cavalry had ever seen. Although the sabers were never drawn from their scabbards except at manuevers it may still be said that that was a heroic era. Any army which in time of peace possesses a faith based not on pleasant memories but on a healthy activity both physical and intellectual and upon a severe self criticism, such

an army is already victorious. A search of history will show that those armies which have been defeated have never had these qualities.

These prosperous times are, alas, only too short. When General Galliffet was made a member of the Superior Council of War the commandants of the divisions and military districts, several of whom had not endured without jealousy the supremacy of a junior comrade who in 1880 was only fifty years of age, returned to their own individual ideas. There were some heated dissensions going even to the point of scandal. The readers of this review will not have forgotten these occurrences. In 1892 we gave the cry of alarm. Perceiving the symptoms of a new anarchy this magazine pointed out with clearness and untiring courage the viciousness of the organization, the faults of our doctrines, and the quarrels of our generals. It implored the ministry to restore discipline in regard to principles and in the higher commands by giving back the chief, a dictator as it was expressed. The mischief was plain and publicly known. The successive ministers contemplated it with tranquility, not to say satisfaction. None of them wish to apply the known remedy. It is not worth while to refute the trifling reasons, possibly the real ones, which were given for not doing it. It is known that the government feared the high military officers, particularly those belonging to that subversive arm, the cavalry.

Let us hasten to say that at the present time we are free from scandal of polemics and rivalries. But has the situation improved any? And is there not some reason to fear that this armistice is intended to promote discouragement rather than a perfect community of views? It is, in fact, certain that the isolated attempts that have been made to prescribe a doctrine have been doomed to failure. The tactics of combat had found in the drill regulations of 1882 a sufficiently broad basis of good sense if there had been an inclination to see in them that which ought to have been seen, that is, not a set of rigid and invariable rules but an indication of desirable measures to be taken at such times as the dispositions of the enemy and the nature of the terrain should not make it necessary to adopt other arrangements. Their main features were applicable in a majority of cases. But either through indolence or else through our Latin

inclination toward synthesis they soon became regarded as exclusive formulas and this was sufficient to create an inevitable reaction with the result of discrediting the good points which they did contain and causing them to be rejected altogether. It can be asserted that no one has been able to put anything else in their place, we have limited ourselves to academic discussions, and with the doctrine confidence has departed.

Since then, however, there has been no lack of alert minds and vigorous temperaments capable of rallying opinions, fortifying intellectual discipline, and supporting in the cavalry an impetus which was formerly so prolific in good results. They have kept alive in an arm of the service which on the whole has been on the decline the worship and the practice of the cavalry virtues. But their spheres of action have been limited almost to their troops, for there the minister has left them, either through negligence or unjustifiable caution, being unwilling to entrust to them the duty of training the whole of the cavalry.

* * *

Thus we have presented all the disadvantages of a lack of proper direction and have reached the point for taking up the vital questions which concern:

The tactics;

The Personnel;

The Organization.

In the period before 1876 the troops were trained on the drill ground in the execution of a large number of high sounding commands. Order and articulation in ranks were carried at least to the last reasonable limit. One was reminded of the acrobat who perched on a table about half a yard square bends backward and seizes with his teeth a coin which has been placed between his feet. Today all this is changed. Our acrobat has descended from his table and gives an exhibition of running at a breathless space over a piece of ground strewn with eggs without breaking one of them. The cavalry inundates the country with detachments that gallop everywhere and only inconvenience the enemy by the dust which they raise. But that is enough of pleasantries. Everyone admits that as the maneuver

proceeds there is an excessive subdivision into detachments that have lost all cohesion at the evolutions and the attack. The committee on regulations has been seeking for a suitable method for restoring order. This is good in its way but it is not much, and the essential thing is the kind of use that is to be made of this document. We may be sure that a simple application of it can always be made. We have among us people who possess a genius for Byzantine studies, the document will be commented upon and annotated. We know that ingenious dealers have invented for such purposes editions of books which have a blank page to correspond with each page of text and these sometimes meet with great success in schools. As soon as these devices are circulated through the cavalry we shall have not a single new regulations but ten, a hundred, a thousand. Furthermore, the old blue book will no doubt limit itself in matters concerning the tactics of masses to the announcement of some plain principles, and no one will blame it for this. But will they not be diverted from their proper aim, and through lack of abundant experiences handled with conviction shall we not leave to wise writers the task of setting forth in pages of subtle arguments those things which we ought to understand? We are ready to wager that simplicity will not be the gainer, that simplicity which, however, finds its only place of usefulness in war. The work of complicated intelligence is now more to be feared than ever because there are so few opportunities for making tests in the fields, under the present theory that a service of two years gives just the amount of time required to finish up instruction in details, and because cultivation renders evolutions impossible in the vicinity of garrisons. When practiced indoors the tactics of combat accomodates itself very well to all the circumstances which may arise and the virtuous are the ones who triumph.

There may be counted as many doctrines as there are divisions of cavalry, not to mention the corps brigades which live without contact with the rest of their arm of the service except in the rare maneuvers when they are placed in divisions and which are inspected by generals who are usually not much in touch with cavalry tactics and methods. The only way to restore unity of doctrine at the very time when a new regulations

is about to appear is to give the entire cavalry a single chief. Under the supervision of this supreme trainer there will be carried on each year some garrison exercises in which the primary requirements will be simplicity, order, rapidity, in brief, efficiency. Afterwards there will be maneuvers where the same qualities will again be required in the execution of a strictly uniform doctrine of system. As an assistant and adviser to the minister he will be able to obtain the material means for conducting practice in the tactics of large masses, by this is meant the use of camps of instruction every year for all of the cavalry. He will be empowered to take the necessary steps to bring the dissenters into line and to eliminate the worthless ones.

Now it must be understood that the measures he will take will not be pleasing to every one. There are no longer any derelicts of war but there are some of peace. But it is to be admitted in the beginning that there are but few of them to be found among the lieutenants and sub-lieutenants. Thanks to their youth, to their engaging in sports, and to their close contact with the troops whose intensive training requires so much of intelligence activity and devotion; thanks to the improved courses in the schools and to the general taste for general study, their muscles, hearts and minds are in good condition and it is difficult to imagine a body of men better prepared for their duties than our young cavalry officers. It can be added that they are in general contented with their situations which is an excellent indication, and in spite of the fact that merits are not always recompensed at their full value yet among these officers there is scarcely ever anything heard of the eternal complaints about pay and promotion with which the military journals and publications are kept filled, and which would give one reason to believe that in the army interest in military appropriations and military affairs holds only secondary place, and that the real object of the army is to provide desirable positions for its officers.

The older officers have on the whole about the same qualities, with exceptions growing more and more frequent. The age for sports has passed and made way for that of reflection, the faith is weakened because it is not sustained by the basis of a sound doctrine encouraged by a high example. One

ceases to believe "that it has arrived" or at any rate to act accordingly. Through being separated from troops one loses the habits of healthy activity and yields to the gentle attraction of the fireside. Nothing is so salutary for mature men as the society of youth. This is strongly realized at maneuvers where the young and old live together for several days. Now what course when has reached the top of hierarchy? The brigadier general has very little contact with troops, he signs a few documents, augments a few punishments, that is his daily duty. His exceptional work is to have an inspection every three months unless he is able to appease what is left to him of his military bigotry through the exercise of his scruples against impending the course of instruction and bring himself to have them a little oftener. How many days does he perform any work on the terrain? About eight days per year at drill exercises and six days at maneuvers once or twice during his term of service in his grade. For a division commander the situation is even worse. If it should happen to be the case that he has lost the ability to make a campaign it would still be remarkable if he could not still endure a few days of maneuvers established in perfect comfort in the pleasant season of the year, and when this is successfully over who would perceive the failings in his health. The semi-annual report of officers incapacitated for field service remains blank unless in order to give it the appearance of having been given attention the names of some innocent captain or major is written on it. It seems that with advancing age the chances of appearing on it diminish. Furthermore, one may have the physical ability and excellent health but still be incapable for field service on account of moral lassitude, this being a condition about which it is a delicate matter to judge and take action with certainty of fairness.

Without question it is fatal to efficiency in time of peace to live as is done much away from troops, and an officer finds less of active occupation in proportion as he rises in the service. The depressing action of such a condition in the profession is likewise fatal. This is the reason why it is necessary to keep up a continuous pruning in the cavalry until such time as the medical faculties shall have discovered some method for abolishing old age with its often very remote premonitory symptoms.

Now there does actually exist a system of inspections intended to meet this necessity. The generals commanding the army corps, who are the only inspectors of the brigades which are not included in divisions, either take very little interest in the cavalry or else are not themselves sufficiently good cavalrymen to be able to judge otherwise than by the results of the employment of the cavalry in combination with other arms, and then their attention is not attracted to the cavalry chief himself, or if it were they would find it unfair to judge him upon a single incident of maneuvers which might be subject to the influence of many various circumstances. The officers in command of the cavalry divisions are better situated for making correct estimates in such matters, but they are not themselves sufficiently influential to force the acceptance of their conclusions without opposition, and besides there are the friendships of garrison life with temptations that cannot be denied to yield to other considerations than the best interests of the service. The army inspectors view the troops once a year, all the troops of two or three army corps, and they cannot be expected to judge of the efficiency of cavalry officers from a garrison maneuver or when confined to roads where they can get no opportunities for showing their ability to estimate a situation or for proving the quality of their professional spirits.

The value of cavalry lies in the officers who command it. In that of the First Empire the ranks were often filled with men who received little instruction, but it was led by young and hardy chiefs who owed their advancement to the qualities that they displayed in warfare. But in time of peace how does the minister make his choice? Let us not consider those cases in which there are brought to bear influences outside of the military profession. Is the choice made from the efficiency memorandum? But once more let it be asked who there is among the men who are powers in the state who is qualified to make a selection based upon professional talents, physical fitness and moral qualifications. How are these things to be measured by words? What is to be the common measure between officers who have been judged and reported upon by different superiors, some of them very complimentary, others very sparing in their commendations, and with varying skill

in briefly sketching an exact portrait in words? The minister who has recently died has the best of ideas upon the subject of recruitment for the higher positions of command, and it should be by no means useless that they have been preserved in the report on the war budget. But there is little trouble about having trained officers, the best system of efficiency reports and the best arranged papers can never indicate to the minister where he will find the true qualifications for command.

Here lies the reason why the cavalry needs a supreme chief. The constant and sever supervision of an active, decided inspector with strong convictions is an indispensable guarantee for an arm of the service in which all depends upon physical activity, prompt decision and full confidence. This officer ought to be a cavalryman, a specialist. As he would attend the cavalry maneuvers every year and would make inspections of regiments, at other times he would soon be able to distinguish those officers who possess the cavalry qualifications from those who do not. To an officer who is skilled in his profession this can be revealed by the march of the troops: the horses are all right, the men only ask to be permitted to march. If the command does not know its duties, if it is wanting in dash and spirit the fault lies with its chief, the captain, the squadron commander, the colonel, or the general. We know the usual excuse, to save the horses; but we must be fair about this, it is only on rare occasions that extreme efforts ought to be exerted, and there should be no hesitation when they do arise. Rapidity and good order which are the principal factors, making up shock action or in producing a moral effect are also the measures of the physical and moral aptitude of a cavalry officer. No one but a general of cavalry in permanent contact with the whole body of that arm of the service will be in a position to determine about these things, to appreciate them, and to take action accordingly for the advancement of some and the elimination of others.

His intelligence ought also to clear up questions of organization. This is no new subject, since, as has already been mentioned, it has existed from the day after the enactment of the law of 1875 to the present time. But the regrettable dual control from which the cavalry yet suffers had not then shown

proof of its disadvantages and the legislator had not consented to immediately uncheck himself. Later on the cavalry had enough to do to maintain its existence at all and there still continues a state of things which has long been condemned in the minds of all cavalymen. The revelation of the motives behind the project of the law of organization made by General Brun to the Chamber of Deputies sets forth one feature which affords a ray of hope for the future, in that it recognizes the necessity for "giving more elasticity to legislative provisions with a view to permitting the modification of the system of grouping regiments into brigades and divisions in accordance with the needs of changing the conditions —." But this is only a project that has now been withdrawn to be changed. It will have to endure many attacks and it is to go no further than to allow the minister a choice of his course of action, and that privilege he will not be able to exercise without overcoming serious opposition.

Since 1870 the Germans have steadily continued to increase their cavalry and there is no indication of any immediate change in their views in this respect since still further increases in it are expected. After having made an effort some years ago to increase the French cavalry the present tendency is toward reducing it, if for no other reason than to utilize the men elsewhere. However, the calculation is too easily made to permit it to be anything of a mystery to anyone that at the opening of hostilities the three or four available French divisions would find themselves opposed by double their number of German divisions. The latter are to be formed, it is true, at the moment of mobilization with the brigades of the army corps, and it is admitted that nothing prevents our doing the same thing. But if the Germans have an organization which is in this one respect poorly adapted to its purpose that is no reason why the French should not have a better one. All the great armies have recognized the necessity of creating in time of peace the organizations which are to be used in time of war. Unless this is an unsound principle why not make it applicable to the cavalry which should permit of an immediate mobilization? One of the brigadier generals who commanded a provisional division with skill and efficiency at maneuvers recently

stated to me that during the first days he found his organization quite difficult to handle. He did not exactly know, as the saying is, at which end to take it, and it was not until the end of the maneuvers that he had learned to make ready and convenient use of his units, and to make them understand his wishes. In time of war our improvised divisions will not have the time to accustom themselves to the handling of their commanders for important cavalry combats will be a feature of the very opening of hostilities.

Moreover, the inconvenience of tardy formation of the divisions would be less with the Germans than with the French. The certain initiative of their mobilization would give them an advantage of at least twenty-four hours in time. The Emperor personally knows the generals to whom he will give the assignments to command without going to the trouble of resorting to professional competitions of political influences. There exists unity of doctrine throughout all the brigades in spite of their dispersion and this is sustained by a strong moral discipline which is to be found in the German temperament. The maintenance of the standards is assured by inspections and the Imperial maneuvers. Among the French cavalry forces no corrections worth while can be made in a system which is bad in itself. Therefore, there is urgent need of changing the system and creating the divisions in time of peace. If this is not done we shall face the prospect of seeing the French cavalry, numerically inferior and from the beginning insufficiently prepared, relegated to the rear of the rifles of the infantry. It would seem that these considerations must place a terrible weight of responsibility upon the opponents of permanent divisions. If this reform were effected the cavalry in spite of the inevitable inferiority in its total effective strength would be placed in an excellent position for opposing that of the Germans, which by reason of existing alliances would have to be divided between the two theatres of operations, Lorraine and Poland.

But who is to be the man to enlighten the minister, who is to impress him and Parliament with right convictions drawn from the faith and experience of a cavalryman? In the absence of competent special advice their opinions are divided

and perplexed by the contradictory counsels of the different bureaux with a pressure of plausible reasons by the generals in command of the army corps who are anxious that no part of their commands shall be removed from them. The Supreme War Council is undecided for the same reasons. Might it not be supposed that the army commanders are most interested and best qualified to decide as to the distribution of the cavalry? But it is admitted without question that the artilleryman is the authority in questions concerning the composition of batteries and the amount of artillery to be assigned to the large units, and this is justly so because in a final analysis the appreciation of the general combined efforts is based upon what can be done with the canon shot. And why should this be any different with the cavalry? Is it not the cavalryman alone with his experience and knowledge of the means and methods available to his arm and with his appreciation of the difficulties of its use who ought to know the steps that should be taken to place our cavalry in opposition to a given force of hostile cavalry on a given piece of terrain?

At this time when such an important problem as organization is being studied the minister should not hesitate to avail himself of the assistance of the cavalryman who is really indispensable and who will aid him to understand the subject, to decide between his different councillors, and to assume the responsibility for the decision.

* * *

On the whole, a consideration of all the conditions shows that an inspector general of cavalry is now more absolutely necessary than ever. No claim is made that the preceding pages will teach anything new, the question has already been judged historically and logically and all minds are made up about it. The purpose here has been simply to clearly set forth the situation and to show how pressing the need has become so that any further delay in taking the proper steps will be inexcusable.

Can anyone pretend that this position must remain vacant through lack of a suitable man to fill it? All that is necessary to do it is to call him forward. Thank Heaven our

country is not yet too poor in manhood to furnish him. There are officers in the army and in the cavalry who are both vigorous in execution and prudent in council, bold and energetic leaders of men. The only thing required is to make a selection of one. It is true that this is a delicate matter for at the present time there is no one who has the celebrity of the chiefs of former times. But this does not prove that the mould has been broken. The minister can easily find a fit man if he wishes, he will not have to far to seek. Our inspector general, appearing at the right time, claiming the loyal support of all his subordinates, inspired with the importance of his own mission, and possessing the full confidence of the chief of the army, will be able to bring a fine and necessary work to a successful conclusion. The cavalry will then enter upon better days, heroic one, increasing the efficiency of the army, and perhaps adding to the glory of France.

THE MILITARY HORSE AND ITS SUPPLY.

From the *Bit and Spur* of October, 1912.

THE startling strong opinion of Major General Wood, Chief of Staff, as to the extreme difficulty of procuring suitable army horses, has italicized the fact that the 23,000,000 horses in this country are of extremely unsatisfactory quality, not even producing as many "good" horses as the 3,000,000 or so horses which constitute the supply of any of the leading European countries. The Chief of Staff spoke pertinently as to the wholesale exportation of our most valuable horse stock owing to the cessation of racing, advising that Congress take the matter in hand. Now Mr. George M. Rommell, Chief of the Division of Animal Husbandry, deals pointedly with the inseparable, direct and important relation between horse racing and national defense, saying: "The effect of racing on the thoroughbred has been and is exactly the same as its effect on the standard bred. Racing made and maintains the breed. Without running races the English people would

never have had their wonderful thoroughbreds, and without trotting races the American people would never have had their magnificent standard breds. If racing is stopped, the breeding of horses stops, for the incentive to breed is removed. The severe campaigning to which a race horse is subjected develops in time endurance, stamina, good wind and sound feet and legs as breed characteristics, for the horse that can go the pace is one which leaves the impress on the breed; the fittest survive. These attributes in a horse make him valuable not only as a sire of race horses but as a sire of saddle horses, drivers, carriage horses, army remounts, etc., and it is for this reason that racing does indeed improve the breed of horses. A handsome horse which can go through a racing career winning race after race and then retire to the stud as sound as when he first stepped on a track is worthy the homage of every man with good red blood in his veins, and a sport, be it with running or trotting horses, which gives us such horses deserves the consideration of thoughtful people. The exodus of so many good thoroughbreds from the United States during recent years is a loss to the country and has created a situation which our trotting horse breeders are wisely taking to their advantage. The conditions which surround running races in the United States and were responsible for hostile legislation do not pertain to harness racing to any serious extent. Harness racing is clean, and it will, therefore, continue to maintain its hold on the public and grow in popularity. If harness racing can be kept clean there does not seem to be any reason why running racing should not also be clean."

Of course every one with even rudimentary knowledge of racing and its surroundings knows that the associations operated under the rules of the Jockey Club could race tomorrow without molestation, if they would conduct the sport "clean," as Mr. Rommell advises and suggests; in other words, eliminate the bookmaker, as the trotting racing people, and other sports have already done. Unfortunately racing under the Jockey Club seems inseparable from the "dividend" idea. No dividends, no racing! As all the courses are held by those apparently holding this opinion, and as courses cost a great deal of money to build, there is little chance for a sport-loving out-

sider to produce racing. The attempt and the hope to reincarnate the bookmaker through legal proceedings is childish and disgusting and it is a wonder men of prominence have not more self-respect than to openly ask for it, or do press agent work to encourage the idea that it is possible.

There is little doubt that the United States has the worst mounted modern army in the world. Americans are beaten at our great horse shows because of their poor horses, rather than by lack of ability to ride. The wonderful standard bred horse has had its ranks depleted by exportation almost to the starvation point, so far as the highest breeding is concerned, and this horse is a trotting thoroughbred. The running thoroughbred horse ranks have lost about \$2,000,000 worth of its best stock in the last two years, not counting those large American stables which now race in France, England, and Germany, driven away by hysteric anti-racing legislation which everyone knows has utterly failed to even decrease public gambling in New York, or elsewhere, hundreds of pool rooms and thousand of handbook men daily working in New York on racing in Canada and in the South. It is claimed there are only forty thoroughbred stallions left in Kentucky, instead of hundreds, and yearlings now sell at an average of \$230, instead of around \$1,000 each, as they did three years ago.

It is known that civilians have great difficulty in finding high class horses for the individual unit. What must be the task when needed by hundreds and thousands for the War Department which needs 20,000 on a peace footing, 50,000 on a war footing, now generally mounted on half-bred drafts with heads half as large again as a flour barrel, with a foot that will not go into a man's hat, and no "gait" at all. What a national disgrace, with 23,000,000 horses in the country from which to draw!

The German Government breeds remounts for the army on five large breeding farms and eighteen stallion depots in the kingdom of Prussia. Large sums are paid for fine stallions. Galtee More, the Derby winner of 1897, cost \$66,670, and Ard Patrick, the winner in 1902, \$100,000. In France there are twenty-two "haras" or central studs under government supervision, and the Chamber of Deputies votes nearly \$2,000,000 a

year for the production of thoroughbreds. In France the government offers prizes for horse shows and actively encourages racing. Austria spends about \$1,000,000 a year and has established several great breeding farms. The farm at Mezőhegyes comprises 50,000 acres of land and six thousand men are employed. Until recently England found horses for her army in the United States and the colonies, but now the Board of Agriculture makes grants to encourage the breeding of military horses.

Probably after we have wasted much time and more money the government will decide to breed military horses direct, as is done by the great European nations, which are not handicapped by the constant depletion and final obliteration of the country's high class racing stock. Perhaps, still later, some one may devise racing under Federal control, as it is conducted in France. At present the jealously guarded "state rights" seem an insuperable barrier, although a few illogical enthusiasts are already talking about its "possibilities."

SOME NOTES ON GERMAN CAVALRY.*

HAVING stayed, owing to the kindness of Count Hans von Kōenigsmarck, with a German cavalry regiment for a short time, I am often confronted with such questions, as: "Which is the best—their cavalry or ours?" This, as you may suppose, is rather an impossible question to answer—and could not well be determined until the day we meet on the field of battle. In Germany they have cavalry regiments, and so have we!

I will try and describe from notes I took at the time, things that struck me as good or bad.

The regiment I stayed with was a dragoon regiment, stationed in a small town in Silesia.

The first thing that strikes one, is, how wonderfully quick they turn the raw material into a trained cavalry soldier.

*From *The Star and Crescent*, of September, 1911.

The German cavalry recruit when he enlists, has almost without exception absolutely no idea of riding; in fact he is appallingly bad.

The recruit is trained by his squadron commander and not by the adjutant. This is quite natural, as it would be impossible for the adjutant to train upwards of two hundred men.

During his training the recruit has a very bad time, in fact, as far as I could see, he was either bumping around the school, doing foot drill, or in the gymnasium all day.

But then in six months he is passed into the ranks, so must needs have a pretty hard training. The German cavalry soldier can go at the end of two years' service, and as more than fifty per cent. do, one begins to imagine what hard work the squadron commanders have in always training about sixty recruits.

This is where I think that the British regimental officer has the advantage over the German. While the former (bar the adjutant) has to work with mostly trained men; and can thus improve himself, the latter has to be continually grinding the rudimentary elements of soldiering into recruits, and has very little chance of studying the higher arts of war in the field with his men.

One gathers from books, such as "Jena or Sedan," "Lights out" and "Life in a Garrison Town," etc., that the recruit's life is a hell on earth by the bullying he gets from officers and N. C. O.'s. Now I am quite certain that, generally speaking, this is not true. In the regiment I saw the recruits used to go through their drills in the cheeriest manner possible: at the same time, of course, observing the strictest discipline.

A thing they used to constantly do, amused me very much——while they were doing sword or lance exercise an officer would suddenly and without warning roar out something, whereupon the whole squad would tear off like maniacs, round some house or mark about 100 yards off, and come back and fall in, in their respective places. The winner was generally rewarded in some small way by the officer. I was told this was to keep them active,

Their oldest soldier—a sergeant major in one of the squadrons, was brought up to me as a sort of curiosity. He had eleven years' service! So one begins to see the difficulties the German officer has to fight against.

Though I think the spirit of the German soldier is good, his shape is bad. In this dragoon regiment (which I always was under the impression had big men), their average height was about five foot five inches, and they were very round thighed.

They are poor riders, and sit stiff, and bolt upright, like a clothes peg on a rope, and always ride with a very tight rein.

What beats me is how they have such well trained horses, and I can't make out why the recruits don't spoil them.

Their remounts are handed over to them in a condition we would describe as fully trained. But they then are taken over by the squadron rough riders and their training continues for another year. The full training of a remount lasts about two years. What strikes one is the way the troop horse is so perfectly balanced and well bent. On parade they always ride on the bit rein with the bridoon quite loose.

They were mostly Hungarian horses in this regiment, with a good deal of English thoroughbred blood in them.

The officers almost without exception rode English and Irish horses. The horse I used to ride on parade was bought by Königsmarck from an officer in the Twenty-first Lancers.

There is no doubt they pamper their horses far too much. During maneuvers it is very seldom they have to spend a night in the open. They are always billeted under some roof. During their war against the Hereros in German Southwest Africa, each cavalry regiment had to send out a few horses. Of the first ship-load within a fortnight of arrival, about fifty per cent. had died of pneumonia, owing to exposure.

With regard to drill and maneuver, I was fortunate enough to see this regiment practice for some days for inspection. I then saw the inspection take place before Prince Meinigen, who commanded the Posen Army corps. So, although I saw the drill and work, I also saw the "eye-wash!"

Their march past is magnificent, but then they make a special study of this and are always practicing it. If they are going to drill and maneuver, they very often begin with a march past. Then the band having played them past, hang up their instruments on a sort of a gallows arrangement at the corner of the parade ground; and fall in, in the rear rank of

their respective squadrons, bandmaster and all, and "have a jolly good four or five hours' drill to keep them fit," as an officer put it to me. Then when this is over they have to gallop off to pick their respective instruments off the gallows and play for another march past, and most likely they will have to play up to about 1:00 A. M., that same evening. Just fancy our bands being treated like this. * *

I was not very impressed with the drill in general. Their drill at a gallop on the whole was good, but every now and then shooting stars were to be seen.

The strength of their regiments is about the same as ours but they have five squadrons on parade. In time of war the Fifth squadron is a reserve dépôt.

In drilling, No. 3 squadron always directs, and so does No. 3 troop and section.

They wheel their squadrons much more than we do. I am quite sure it takes more out of their horses, and is slower than wheeling their troops and then forming squadron.

Their method of extending and closing seemed rather neat. The C. O. or squadron commander, as the case might be, would give the command to extend. Whereupon the troop commanders would all gallop (if the regiment was moving at the trot) about 100 yards ahead and outwards from No. 3 to what their extended position would be. Immediately on arrival the commander blows a whistle and the regiment gallops forwards and outwards: center guides going straight for their troop leaders, and the troop extends on each side of their center guide as they go forward to the required distance. To close, they do just the opposite.

Section commanders have the double eagle on their penons instead of having the ordinary black and white as the men have. This on maneuvers is rather useful.

Their lances are ten feet six inches and are made of tube corrugated steel. They seemed to be too heavy and unwieldy, especially for such small men.

The lance for German cavalry is quite the "arme blanche." In fact there are very few Hussar regiments now. A few years ago they turned a great many saber regiments into lancers.

When they dismount for action they have no method of

hooking their lances to the saddle, but simply stick the lance point into the ground, with the result that when they come to mount again, their lance is very often some yards away from their horse, which means a great delay in getting mounted. This is where the cavalry soldier is very slow and clumsy, in mounting or dismounting, and he is slow also on foot, being apparently weighed down by his enormous boots and heavy equipment.

I thought their scouting and reconnaissance was bad. They go in tremendously for what one might call stage scouting. *i. e.*, galloping on to the top of a rise, shading their eyes with their hand and looking for the enemy.

Signalling in cavalry as far as I saw, was practically *nil*, and what they did do was very slow and not of much use.

Shoeing in the German army is bad. They don't seem to go in for frog pressure, in fact the frogs are about one inch off the ground surface. The only good shoeing I saw was at a place in Berlin, and above this establishment's door was written "The English Shoeing Smiths."

The German soldier has a great deal of *esprit de corps* and, as a rule turn themselves out smartly.

They have rather a nice custom: when the colonel rides up to his regiment in the morning, which is fallen in, he says, "Good morning, Dragoons!" and they all shout back at the top of their voice, "Good morning, Colonel!"

On maneuvers and drill parades, the "pow-wows" are most laborious affairs, especially if you cannot understand all the technical terms in German. After about ten minutes' drill, the "halt" and "officers' call" is sounded. Then a confabulation goes on for about fifteen minutes. First the Colonel then the brigadier and the divisional commander, and lastly, the army corps commander all comment on the faults they saw in the last ten minutes' drill.

During my stay with this regiment Koenigsmarck and his brother officers, simply laid themselves out to be kind and hospitable to me.

I had a soldier-groom servant, and two jolly good horses at my disposal. Sometimes when I used to canter on to parade, I began to wonder if I wasn't in the German army!

I had a very nice suite of rooms. I was very touched one day, when on entering them rather unexpectedly, to find an

officer arranging some flowers himself which he had sent for. They studied my comforts so much that they had to send twenty miles to procure a bottle of "Black and White" whiskey to put in my room!

Most of the officers in the cavalry regiments are good sportsmen. They ride in steeple-chases and shoot a great deal.

Guest night in the "Casino" is very like the average guest night in a British mess. Returning the healths of everybody in turn is rather an ordeal.

After dinner the room is cleared, and dancing and beer-drinking begins, and the good old band which has either been playing march pasts or drilling hard in the rear rank all day plays on merrily into the small hours.

One night when I was guest of the evening, and was about to make my departure, the band struck up "God Save the King!" I stood to attention, and they all did the same. Little incidents like these make one's blood tingle with pride.

K. B.

THE STRATEGICAL EMPLOYMENT OF CAVALRY.

BY MAJOR GENERAL C. V. F. TOWNSHEND, C. B., D. S. O.,
Commanding Home Counties Division.

(From the *Journal of the Royal United Service Institution* for August 1912.)

THE following reflections upon the strategical action of cavalry were suggested by a lecture on this subject, which was delivered at the Royal United Service Institution on the 24th April*; it is hoped that they may prove of interest to students of war who are interested in the higher leading of cavalry.

"The Strategical Action of Cavalry," by Brigadier General H. de Lisle, C. B., D. S. O. It appeared to the writer, who was present at the lecture, that the points admitting of divergence of opinion were too numerous and weighty to have been dealt with verbally in a satisfactory manner, in the short period available for discussion on conclusion of the lecture.—C. V. F. T.

*Reprinted in the July, 1912, number of the JOURNAL OF THE U. S. CAVALRY ASSOCIATION, page 125, et seq.—EDITOR.

The introduction to the lecture contained a definition of the rôle of cavalry in that period prior to the meeting of the two main armies. Their most important mission was described as being that of *reconnaissance* by force and by stealth.

This leads one to consider the different cases of distribution of cavalry in the service of *couverture*, before the commencement of war; for example: (a) in the case where the adverse groups of armies would be quite close, as in a war between France and Germany, or (b) where the adverse groups of armies would be distant from each other as in the case of war between, say, Germany and Russia, or Austria and Italy. In the former case, (a) the cavalry would probably be divided into two parts, one covering the most dangerous flank of the group of armies, while the other would be with the group of armies and destined to take part in the decisive battle.

We also hold that it is more than probable that a war in Europe will not be ended in the first great decisive battle, but that the war will continue, not, perhaps, on the gigantic scale of battle such as the opening scene of war between France and Germany would present, but on a scale, say, of Bonaparte's wars in 1796 and 1800. We see no sense in the oft heard opinion, "Oh, the war will be finished in the first great battle." No nation is vanquished till it admits itself conquered; had France continued the struggle in 1871 she would at least have had Lorraine today. The cavalry will play a great rôle in the second stage of a war.

On page 788* of the June number of this JOURNAL we read that:

"Before committing his forces to any definite plan, the Commander-in-Chief will require reliable information of the enemy's dispositions, his places of concentration, the direction of march of his forces, and the nature of the country between the two armies; for this information he trusts to the commander of his independent cavalry."

This passage was understood by some speakers who took part in the discussion as implying that the Commander-in-Chief would wait for the cavalry general to send him full information on the above headings. Now it is generally allowed that *strategic* offensive, when it is a case of war between Powers

*See page 127 of the JOURNAL OF THE U. S. CAVALRY ASSOCIATION for July, 1912.

sensibly equal, alone leads to victory; it is not only advantageous, but it is indispensable. The strategist (Commander-in-Chief), who, directly he has concentrated his masses (principle of economy of force), deliberately moves forward in the general direction of the bulk of the hostile forces in the field, and against that point of the enemy (*i. e.*, against one of his flanks or his center), which strategic reasons indicate as being his weakest point, will act with his mass, and will have, therefore, the greatest chance of success, given, of course, that he has a general knowledge of the whereabouts of the enemy, indicated in peace time by the presence of railways and detraining platforms, intelligence department, etc., including, of course, those new agents of reconnaissance and assistants to the strategic cavalry, *vis.*, aeroplanes.

THE LESSONS OF THE MANCHURIAN WAR.

The war in Manchuria provides numerous examples to illustrate this interesting subject. General Kuropatkin, whose character as an over-cautious and hesitating general now stands revealed by official documents, considered that he could not advance and deliver battle until he was accurately informed as to the enemy's strength and positions. Now, this is precisely the information which, in these days, one is not going to get in a precise manner; the German cavalry did not get it in 1870; nor did Kuropatkin get it in 1904; he remained inactive, and was beaten in consequence.

The strategical lessons of the war in Manchuria show that the Commander-in-Chief *cannot* wait for accurate information to reach him, because he is never going to get this accurate information; that is all done in *peace time*, as mentioned above. As soon as he has formed his plans, and concentrated every available man to fight, on the principle of economy of force, detaching the minimum necessary, he must move forward straight on his objective, which is the bulk of the enemy's forces in the field. It does not matter if the enemy concentrates a few hours or a day before him; he is not going to let the enemy impose his will on him.

Another point to consider is that of the cavalry duel, the great battle between the opposing cavalry bodies, with which it is often said that the period of reconnaissance will end.

Now, from what has been said in the first page of this article, it will be seen that this great preliminary cavalry battle which, in the opinion of many military writers, is a useless sacrifice of men and animals—resulting perhaps in the complete disorganization and exhaustion of both parties—has little chance of coming off, and that the cavalry would be much more profitably employed in assisting in the great *decisive* battle, which must be fought out by the infantry and artillery, and which is, perhaps, to decide the fate of the campaign.

The lecturer referred to the large amount of intemperate matter which has been written on the subject of cavalry in recent years, and pointed to the fact that even eminent military writers of the various great powers have raised doubts as to the possibility of great cavalry successes in future wars. In this connection it is interesting to note that, since Napoleon gave us those examples of how to use cavalry in battle, in the great charges launched by him (Austerlitz, Jena, Eylau, Friedland, Essling, Wagram, Borodino), the rôle of cavalry in great battles has gradually got smaller and smaller (examples 1866, 1870); in the latter wars the action of cavalry on the battlefield was attended with good results when they were employed in small fractions (such as Von Bredow's brigade at Rezonville), and it was unsuccessful when they were used in masses (as by Gallifet at Sedan, or by Bonnemain at Froeschwiller). Towards the end of the 19th century we find a host of writers decrying cavalry action, and the chorus is renewed with vehemence at the commencement of the 20th century, when all jumped to hasty conclusions during the campaign in Manchuria, and loudly proclaimed that cavalry was a failure, before they were in possession of *official documents*.

Now that we have these official documents we discover that the Japanese had few cavalry, and in consequence were not able to put the indecisive victories of Liao Yang and Mukden to good account.*

*It must not be forgotten that the primary cause of the indecisive nature of the victories of Liao Yang and the Sha Ho, was the fact that the Japanese had violated the principle of *economy of force* by detaching 150,000 men to take Port Arthur, that fortress being a secondary objective, whereas, on the principle of economy of force, the *mass* of the Japanese was required to destroy the bulk of the Russian forces in the field.

It also appears that the Japanese have deeply regretted their want of cavalry, and intend, as the result of their experience of the latest war, to raise the strength of that arm to eight divisions. To us the most interesting lesson of the war, as regards cavalry work, is to find the Japanese cavalry supplementing its numerical inferiority by means of infantry support (mixed detachments), during the Liao Yang maneuver, and executing its mission (*viz.*, to cover the left flank of the group of armies) very skillfully. The employment in this way, of mixed detachments,* acting as support, *points d'appui*, to strategic cavalry is the plan of the late General Langlois, the eminent strategist, and it is advocated by many of the leading French generals of today.

It is generally allowed by the leading military experts in France today that a large strategic (or general) advanced guard to a group of armies, having a front of some forty-two miles or more is nothing more or less than a positive danger (especially when it is placed under the general commanding the strategic cavalry), for it is a violation of the principle of economy of force;† it involves a serious dissemination of force, and it may be overwhelmed before aid can arrive, or it may force the Commander-in-Chief to fight at a time and place against his intentions. On the Russian side, we find that the cavalry, although numerous, gave mediocre results, generally speaking. But, we ask, did General Kuropatkin give his cavalry a proper chance, when he disseminated it in small parties over the zone of operations, thus violating that principle of economy of force, which has never been violated in history without disaster?‡

*The true rôle of cyclist infantry is here indicated.

†The experience of former wars proves on the contrary that in order to be properly informed, the commander of an army should correspond directly with each of the divisions of cavalry which are scouting his front and flanks. To let all information pass through the commander of a great corps of cavalry before coming to the Commander-in-Chief of a group of armies is to introduce a middle man, and so lose time. Moreover, there is the possibility of the Commander-in-Chief seeing his commander of cavalry giving orders contrary to his intentions. Take the example of 1805, when the Russians changed the direction of their march, passed the river and uncovered Vienna. What direction to operate in and what was to be done could only be settled by the Commander-in-Chief; Napoleon's reproaches to Murat on that occasion are interesting reading.

‡ Examples: The Austrians in 1796, 1800, 1805, 1809, 1866; † Napoleon in 1813 and 1815; the French in 1870; the Russians in 1904.

It was only the premature surrender of Stoessel at Port Arthur which released the Japanese Third Army (Nogi) and enabled it to reach the bulk of the Japanese forces in time to take part in the battle of Mukden. General Mistschenko, with his cavalry performing the service of *couverture*, gave accurate information regarding the disembarkation and movements of the Japanese armies; but we find General Kuropatkin allowing no initiative whatever to his general in command of the army of *couverture*, and interfering to such an extent as to render action impossible.

To sum up, the war in Manchuria has in no way proved the failure of cavalry; it has simply shown that this arm can only give great results when it is well employed.

NAPOLEON'S CAVALRY.

We repeat there is more to be learnt from the lessons of latest campaign, *viz.*, the war in Manchuria, than from the examples of Napoleon's method of using cavalry, both from a strategic and tactical point of view—for though the great fundamental principles of war laid down by Napoleon, the founder of modern strategy, do not change, still it cannot be denied that the methods of fighting are not the same in 1912 as they were a hundred years ago. Napoleon in battle held his cavalry in masses at a short distance from the enemy, say at, 600 or 700 yards, ready to charge on the first favorable opportunity; whereas, today cavalry would have to await their opportunity concealed in folds of the ground, etc., far distant from the lines of hostile infantry; the open and rolling ground formerly sought by the cavalry general, has today become the cherished terrain of the infantry and artillery; cavalry is compelled to seek for the covered approaches, formerly dear to the rifleman, in order to be able to approach the hostile infantry, and even then it must risk annihilation before getting into a gallop. It is, in short, by *surprise* alone that cavalry can now succeed in modern battle, *i. e.*, it must surprise infantry before the latter is ready to receive the charge; and even this eventually promises to be rare. The dangerous zone in Napoleon's time was 200 hundred yards, whereas now we have 2,000 yards for rifle, and, say, 5,000 or 6,000 yards for field guns; moreover,

magazine rifles have dispensed with all the complicated infantry formations of the past; commanders of units have only to close their elastic single rank formations in order to face the threatened point of attack, in any place they may happen to be. In short, the introduction of the small bore rifle has compelled infantry under fire to abandon the dense lines of Wellington at Vittoria and the massive columns of Macdonald at Wagram, and of Ney at Waterloo. As infantry and artillery have had to effect and entire change in their fighting tactics, we hold that cavalry also cannot be permitted to preserve the methods of Austerlitz and Wagram, *i. e.*, the tactics of the smooth bore cannon and the flint-lock musket.

Austerlitz, Eylau and Wagram are sometimes instanced as battles won by cavalry charges, but at Eylau the great charge of Murat, with his eighty squadrons of cavalry, was ordered by the Emperor to be delivered, in conjunction with Marshal Davout's turning movement, with a view to checking the advance of the Russians (who had assumed the offensive after the infantry attack delivered by Augereau's Army Corps had failed). Though Murat's charge practically destroyed the Russian center, it was unable to do more owing to the difficulties of the ground; the turning movement of Marshal Davout with the Third Army Corps also came to a standstill. The Emperor had actually ordered a retirement in the night when the arrival of Ney's Army Corps at nightfall to turn the Russian right, decided Benningsen to retreat. In short, we contend that Napoleon won at Wagram, Eylau and Friedland, as at Jena, Bautzen and Ligny, *not* by the shock action of his cavalry, but by using his favorite maneuver (in strategy as in tactics), that is to say by delivering a *turning attack* with his secondary mass (*which was generally accompanied by the bulk of the cavalry*) against that wing and portion of the enemy's rear which was nearest the latter's natural line of retreat; and he combined with this movement his *main attack* with his *principal mass* against the same wing which was being turned by the secondary mass. The other wing of the enemy (farthest from his line of retreat) which was not turned, he contained by attacking and holding it with his minimum force, which under an independent commander, had to fight a combat of more or less defensive

character, *i. e.*, a combat "*d'immobilisation et d'usure*" (example Massena at Wagram). Napoleon won the above quoted great battles by using his great fundamental principles of economy of force, mass, rapidity and security in combination; the artillery might claim to have won Napoleon's victory at Eylau just as much as the cavalry. It was Davout's *turning movement in conjunction with Macdonald's advance with the principle mass* which won Wagram.

On page 792* we read:

"We find him (Napoleon) following no doctrine or general theories, but he uses his cavalry for special purposes, giving very clearly defined instructions on each occasion. Not once did he send all his cavalry reserve on a vague mission of exploration. * * * In 1805 he sent it across the Rhine as a screen to deceive the enemy and when the Grand Army executed its turning movement on Ulm, this cavalry supported by two corps acted as flank guard."

This procedure was, in fact, the carrying out of his principle of security, which, in other words, was the retaining of his liberty of action and maneuver by means of his cavalry supported by infantry; and the flank guards of his army came under the heading of the same principle. Today a commander-in-chief of a group of armies will impose it in the same way by using strategic cavalry supported by *mixed* detachments. Throughout all his campaigns we find Napoleon faithful to the principle of security, and 1796 is perhaps the first illustration of this practice.

"All the great captains of antiquity, and those who later have marched worthily in their footsteps, have only done great deeds by conforming to the principles of the art of war * * * whatever may have been the audacity of their enterprise and the extent of their success they have only succeeded by conforming to those principles * * * one has attributed my greatest success to luck, and imputed my reverses to my faults: but if I wrote my campaigns, one would be very astonished to see that *in every case I exercised my faculties in conforming to the principles of war.*"—Napoleon's conversation at St. Helena, 16th November, 1816.

Napoleon's victories have been ascribed to the fact that his cavalry generals were all young men; but this fact applied to nearly all his generals, and was the natural outcome of 20 years of war from the time of the Revolution till Waterloo.

*See page 132 of the JOURNAL OF THE U. S. CAVALRY ASSOCIATION for July, 1912

Not one of his generals was over forty-nine in the 1815 campaign; his oldest general in that campaign was Grouchy, a cavalry general whose handling of the detachment on Napoleon's right flank left much to be desired. On the other hand, the gallant Blucher, another cavalry general, the most tenacious and bitter opponent Napoleon ever encountered, was over seventy when he led the cavalry charge to retrieve the day at Ligny and when, two days afterwards, he encouraged and urged on his Prussian infantry in their wonderful march to help Wellington at Waterloo.

Napoleon.....	46 years.	Vandamme.....	44 years.
Davout.....	45 years.	Rapp.....	43 years.
Ney.....	46 years.	Clausel.....	43 years.
Grouchy.....	49 years.	Suchet.....	43 years.
Lobau.....	45 years.	Pajol.....	43 years.
Lamarque.....	45 years.	Gerard.....	42 years.
Kellerman.....	45 years.	Drouet.....	41 years.
Reille.....	44 years.	Exelmans.....	40 years.

The above is the age of Napoleon's commanders of army corps in the 1815 campaign; several of the divisional generals were under forty, and one brigadier, Labédoyère, was twenty-nine.

CAVALRY IN PURSUITS AND RAIDS.

The rôle of *cavalry in pursuit* is the most important that is played by that arm, especially so in the 20th century, when, as far as we have seen, the long duration of battles leaves the infantry of the victor or vanquished equally exhausted and incapable of movement. Cavalry is the only arm which can today be used in the pursuit; it is all very well for writers to attack generals for not pursuing after a victory, for not exploiting their success, for not having destroyed the beaten enemy. But it must be recognized by practical men that if the pursuit was not carried out it was because of the exhaustion of the troops.

Since the days of Napoleon we no longer hear of the head-long pursuits of cavalry with their swords in the enemy's backs and with such brilliant results (example, the pursuit of the French cavalry after Jena, where fortresses surrendered to a few dragoons).

Is not the reason to be found, in this century, in the enormous size of the groups of armies on each side? Will such great numbers, in case of defeat, break up and dissolve like the allies of Austerlitz or like the French at Waterloo? Will not a group of armies retire in much more deliberate fashion? Take the example of Liao Yang and Mukden. Did the German cavalry pursue after Froeschwiller? Did it not remain inactive after Rezonville?

Again, in a war of the 20th century it would appear that one of the chief duties of cavalry in pursuit will be to prevent the beaten side from destroying the *railways*, and especially bridges, in their retreat. As an example of the modern form of pursuit of cavalry, we prefer to read of Sherman's exploit in the pursuit of Lee and Johnston, to reading Napoleon's wars, *i. e.*, if we want to get precise indications as to the rôle of cavalry in the pursuit of today.

There is no space here to touch on the rôle of cavalry in strategic raids; it would be an interesting point to discuss whether the using up of *fighting cavalry* for raiding work is not a violation of economy of force? However, it appears, we can accept it as a fact that during the past century the *tactical rôle of cavalry has diminished and its strategic rôle has greatly increased*; and we think it will be very shortly accepted throughout Europe, that—given the great strategic fronts of modern groups of armies, some fifty, sixty, seventy miles or more—the use of a large strategic advanced guard to a group of armies is a violation of the principle of economy of force, and that, on the contrary, the principle of strategic cavalry, using a chain of mixed detachments as a support, will be accepted.

MACHINE GUNS IN THE SERVICE OF SECURITY AND INFORMATION.*

THE general scheme of reconnaissance is well known—large masses of independent cavalry in front of the army, information detachments, information patrols, independent patrols far in front, and finally paid scouts and spies near and with the enemy. Our regulations clearly define the duties of information patrols by laying down for their guidance the motto: "See, but don't be seen," which means, avoid contact and fighting. More difficult are the duties confronting the information detachment; it is not sent out merely for the purpose of orienting us as to the enemy; but rather to prevent the enemy from reconnoitering us, to prevent the unobstructed passage of his reconnoitering bodies or, in short, to screen the movement of our troops. To efficiently perform all its tasks the information detachment will often find itself compelled to fight the enemy and to carry the battle to a finish, either offensively or defensively. Let us first consider the offensive action.

In pursuing its designated route, the detachment will encounter some point or other held by the enemy and thus find itself prevented from continuing the march. Assumed that the condition of the country precludes the possibility of going around the enemy's position, and considering that in a case where we can and do go around the enemy there is nothing to prevent the latter from continuing his reconnaissance to the head of our main body, we find that there is but one thing the commander of the information detachment can do and that is to attack, to drive the enemy from his position, to pursue him with part of the detachment and to continue the reconnaissance with the remainder. As a rule, the information detachment is made about one troop strong; however, patrols, messengers and casualties decrease the strength by approximately one platoon. For a free attack on the hostile position (attack with the arme

*Translated from *Kavalleristische Monatshefte*, October 1911, by Harry Bell, M. S. E., U. S. Army.

blanche being out of the question when the position is half ways fortified) there will be about one hundred carbines available. Although our cavalry may be well trained in the dismounted fire fight, a detachment sent out for reconnaissance will be inordinarily long delayed in its important task by a slow, dismounted fire fight. But what if the fire power of two machine guns should be added to those one hundred carbines? These machine guns would support the attack after having prepared it; they would pour a murderous fire on the enemy and might even, if posted in a favorable position of themselves force the enemy to evacuate his position. I well recollect a regulation fire fight in a maneuver between one troop and two machine guns at a range of 650 to 700 paces in which the machine guns silenced the carbines of the troop within twenty-one minutes. The moral factor of the machine gun also should not be overlooked; it is but natural that the detachment commander will fight entirely along different lines when he knows that in addition to his troop he has two machine guns under charge of an efficient subaltern.

Let us now consider the defensive action. How often does it happen that a detachment is sent ahead to a strategically important point to remain there for a definite period and to hold it at all hazard until relieved by infantry following up. In most cases the question is of a stream crossing, a defile, a commanding hill, etc. As a rule one detachment will have to look out for two or three such places; in addition patrols have to be sent ahead, communication has to be kept up with neighboring detachments and the main body; in short, the troop is scattered and but few men remain at the disposal of the commander for defensive purposes. Assumed, the detachment is accompanied by two machine guns. Those naturally would be posted in a favorable position just there where the enemy is most likely to show himself, in ninety-nine cases out of a hundred on our own line of march. We would mask the guns, ascertain distances to prominent points in the terrain and do everything possible to produce great fire effect. Having the machine guns present, the duties of the troop would be easier, it would be more concentrated and the commander enabled to use it here or there according to the situation; if our position is a

strong one, there will be no difficulty, provided the terrain is correctly utilized, to defend ourselves for a long time, even if attacked by numerically stronger hostile cavalry, and hold the position as long as circumstances require us to do so.

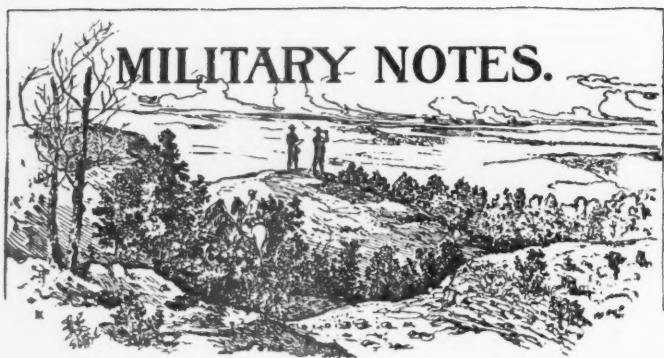
Machine guns play an important rôle in the service of security also. In a march toward the enemy they would be attached to the advance guard, as that part of the force is the first to engage in battle and must prepare a favorable battle situation for the coming up main body. In the cavalry we have the motto: Get there, see, act; we have no time for a lengthy estimation of the situation. As a rule the commander of cavalry machine guns has but seconds at his disposal for action; if he does not succeed in utilizing them, he will hardly get a chance to fire. Consequently the machine guns should be at the head of the advance guard. Analogously, in a flank march the machine guns should be with the flank guard. If, for instance, the marching troops go into bivouac or halt, the machine guns continue the march to the nearest favorable point, make front there against the probable route of approach of the enemy, and prepare to open fire at any moment. Of especial importance will be the effect of machine gun fire in an eventual retreat. They will know how to support the cavalry in its difficult task; retreating by echelon from point to point they will force the enemy to deploy larger forces for the attack than in a common retreat without machine guns; they will force him to fight on a larger scale; force him to more mature consideration; and thus our retreating troops will gain more time, there will be more order and breathing spaces, until we finally are enabled to again oppose the enemy.

Concerning the employment of machine guns on outpost service, I believe it is necessary to make distinction between two eventualities. If the terrain is close, it will be well to hold the machine guns in hand; they would in that case be attached to the support. As a matter of course, they must be kept in readiness at all times to proceed without delay to any threatened point. If the terrain is entirely open and if we know from which direction the enemy must come, the machine guns would be posted on the line of observation at the most exposed or dangerous point; there they should be favorably posted under

cover, natural or otherwise. If it is intended to employ the guns at night, they should be sighted before dark. It should always be borne in mind that in the service of security machine guns must never open fire prematurely so as not to betray the strength of our position. And that very strength lies in the machine guns.

However, whether accompanied by machine guns or not, our cavalry has always acquitted itself well, and there is no need to doubt but what it will always do that in the future.





MOBILITATE VIGEMUS.

The Editor:

THERE is a little sentiment on the fly-leaf of the *Rasp* for 1912, which you may not have noticed. It has been suggested by several cavalry officers that it should be reprinted in the *CAVALRY JOURNAL*:

MOBILITATE VIGEMUS.

"War is movement, and movement intelligently directed means victory. No amount of passive courage or mental activity can replace it. The habit of movement, of physical exertion, must be acquired in youth and preserved through middle age. It can no more easily be acquired in the course of a campaign by oldish men than a foreign language. To be really useful it must have become instinctive. That, as I take it, is what we mean by training."—Mott.

I enclose the program of Major Austin Wadsworth's annual meet at his home in Genesee, N. Y., which might well be published, as it gives some new stunts for some of the post meets.

FRANK MCCOY,

Captain Third Cavalry.

RULES FOR GAMES.

Horses over 15 hands must be ridden in all events except Tandem race.

TENT PEGGING

Army or Indian lances to be used. The peg to be firmly driven into the ground, and to show four inches in height by two in width.

Strike, 3.

Speed, full gallop.

Take, 5.

The following memoranda for conducting Tent Pegging in India are printed here for the information of competitors. These rules were originally intended for the Bengal Cavalry, as a substitute, for the most part, of any regular system of equitation, to give the men confidence, a firm seat, and a correct hand and eye.

The seat from the hips downward should be immovable, the body from the hips upwards bent well down to the right rather than forward, its sway being well supported by left leg, the handling of the lance easy and free from stiffness, the right arm slightly bent, the hand just in front of instep, the back of the hand inclined downwards, and the thumb along the lance, the lance to be kept close to the ground. Any jabbing at the peg, striking it with the lance sloping from above downwards, or lengthening of the lance beyond the balance, must be avoided. A firm seat is indispensable for good tent pegging. *Riding at the peg in an upright posture is not tent pegging.*

RIDING AT THE RING.

Lances to be at least ten feet long.

Ring $1\frac{1}{2}$ inches.

Speed, full gallop.

Ring 8 ft. 6 high.

JAVELIN THROWING.

Any serviceable weapon allowed. Spears must be thrown before passing distance post and remain sticking in target to count. Post 35 feet from target line.

Target 2 feet square and 12 feet from track. Strike 3.

Speed, full gallop.

Center 5.

FENCING ON HORSEBACK.

Bouts three minutes. Fencing rules.

CAVALRY FIGHT.

Head cuts only. Bout four minutes. Party having most plumes left, wins. Any rider losing his plume must retire immediately. Mug to each of winners

SABER OVER HURDLES.

Hurdles 3 ft. 6.

Rings 3 inches.

HEAD AND RINGS.

Blows will not be counted unless given correctly.*

Rings must be carried off by saber to count.

Saber must be worn with scabbard and drawn after passing first post.

A fair gallop must be maintained.

	FIRST RUN	SECOND RUN
High Head (Count 2)		
5 ft. from ground.....	Right Cut.....	Quarte Point.....
Low Head (Count 5)		
2 ft. from ground.....	Left Cut.....	Left Point.....
High Ring (Count 5)		
8ft. 6 in. high, 2 in. ring.....	Tierce Point.....	Tierce Point.....
Head on Ground (Count 2)	Front Cut.....	Rt. point agst.
Low Ring (Count 5)		Infantry
2ft. high, 4 in. ring.....	Front Cut.....	Front Point.....

LEMON SLICING.

Saber must be worn with scabbard and drawn at starting. Lemon to be hung at height of rider's shoulder and to be taken at "right cut."

Speed, gallop.

TANDEM RACE.

One pony to be ridden, the other driven. Traces not required. Winner must drive both ponies properly.

Special cup.

PICKING UP OBJECTS.

No straps, loops or other appliances on saddle allowed. No restriction as to size of horses, but in case of a tie the rider

*That is according to the U. S. Cavalry Tactics.

of the tallest horse wins. No difference in height less than one inch to be considered.

Anyone using a Mexican or Army saddle must score two points for each one made by a rider on an English saddle.

MANIKIN RACE.

(Rescue of wounded.)

Riders must dismount. Tenderly lift their helpless charges, place them on their saddles and carry them in comfort and safety to the goal.

THE NEW CAVALRY EQUIPMENT.

IN reading the excellent article by Captain Davis in the last CAVALRY JOURNAL some ideas have occurred to me which I havewritten out in the hope of starting a discussion that may be of use to our arm.

THE HALTER BRIDLE.

This appears to have an advantage in weight over our present equipment. The rope halter tie also looks good. The other features mentioned are not peculiar to a halter-bridle but may equally well be applied to a bridle without the halter combination.

There is a disadvantage which appears to be serious. In the-field the greater part of this combination must be kept on the horse at all times. Thus, the man will have no opportunity of properly cleaning and caring for it and, due to exposure to rain and sun and the sweat of the horse, it will soon become unserviceable.

It is not unusual to find several halters broken on visiting the picket line in the morning. As the straps of this combination appear to be lighter than those of our present halter, the breakage will probably be greater. The result will be that nearly every morning it will be necessary to issue several halter-bridles before the troop can move out. With our present arrangement the man can go without his halter.

THE SABER.

From the illustration it appears that the prolongation of the axis of the grip passes below the point of the blade. Not only for thrusting, but for cutting as well, the axis of the grip should pass through the point. The weight of the blade should lie below this line in order that edge shall always lead in making a cut. If the weight of the blade is above this line the saber has a tendency to twist in the hand and, unless held very firmly and carefully directed, the stroke will be made with the flat instead of the edge of the blade. The experimental saber issued a few years ago was very badly constructed in this respect.

THE INTRENCHING TOOL.

It may sometimes be necessary for cavalry to intrench but such occasions should be so rare as not to justify weighing the cavalryman down with an intrenching tool. If intrenching tools are needed they should be carried on the squadron ammunition wagons. That extra horseshoes will probably be much more useful.

THE BAYONET.

While the intrenching tool may be useful in ditching tents and cutting firewood, I can discover no use for the bayonet as a cavalry weapon. While it is true that you cannot shoot an enemy out of a position *if you remain at a distance*, it is equally true that you can shoot him out *if you advance close enough*. If you can stick a man with a bayonet you can certainly shoot him. If we need any other weapon than the rifle for dismounted fighting we have an excellent automatic pistol which, at bayonet range, is much quicker and more effective than the bayonet. The tendency to use cavalry dismounted, by those not familiar with its proper use, is too great now. Why should we increase that tendency by the adoption of the bayonet. I regard the adoption of the bayonet as a step backward.

Attention is invited to the article on page 762 of the CAVALRY JOURNAL of January, 1911, on "The Question of the Bayonet."

C. E. STODTER,
Captain Ninth Cavalry.

AN UNSUITABLE MOUNT.

Name: "Stub," abbreviated from stubborn.

Height: Fifteen hands and one inch.

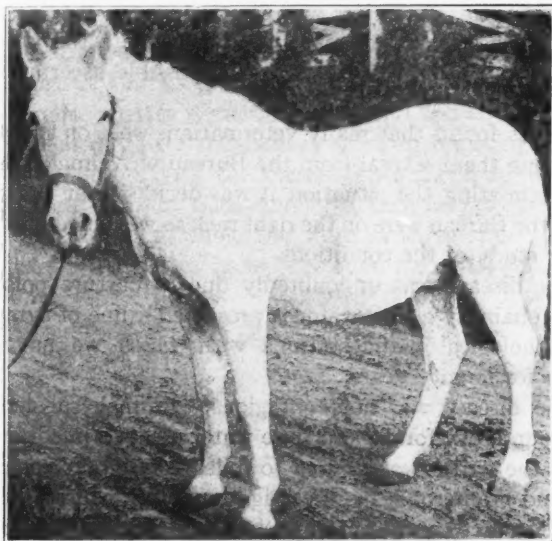
Age: Twenty-seven years.

Sire: Supposed to have been a Morgan horse.

Dam: Without doubt a Navajo mare.

Owner: Major Alonzo Gray, Inspector General since 1888.

Cost: Sixty-five dollars.



STUB.

Record: Never ran a steeple-chase of three miles in eleven minutes but carried owner fifty miles in less than seven hours.

Service: New Mexico and Arizona—1888 to 1890; South Dakota—1890 and 1891; Wyoming 1891 to 1893; Nebraska—1893 and 1894; Illinois—1894; Virginia—1894 and 1895;

Texas—1895 to 1898; Louisiana, Alabama and Florida—1898; Porto Rico—1899 and 1900; Missouri 1901; Kansas—1901; and 1902; Arizona—1902 to 1906; Washington—1906 to 1910; Wyoming 1910 to 1912.

Present condition: Sound and without a blemish—September 15, 1912.

KANSAS HORSE PLAGUE.

WHILE the so-called Kansas Horse Plague was at its height, the writer was directed by the War Department to proceed to Dodge City, Kansas, with the object of investigating its contagiousness and, if possible, ascertaining its cause.

It was found that many veterinarians were on the ground and among them several from the Bureau of Animal Industry. After estimating the situation it was decided that the gentlemen of the Bureau were on the right track so we joined with them in their study of the conditions.

The disease was undoubtedly due to pasture poisoning, in all probability a mould, for it presented a line of symptoms and pathological manifestations with which we have been familiar for twenty years.

The disease was not contagious. Animals subsisting on good, sound, dry forage and pure water escaped infection.

As the writer was limited to mileage reimbursement only on a land grant road, his investigations were considerably restricted, in fact he was out of pocket over fifty dollars for automobile hire in the short period of seven days, and part of this time he was forced to accept the charitable offer of the Bureau Veterinarians in the matter of transportation to ranches and farms. Actual expenses would have given an opportunity for proper investigation of this matter.

GERALD E. GRIFFIN,
Veterinarian, Third Field Artillery.

BRANDING GOVERNMENT HORSES.

From *The Breeders Gazette* of September 4, 1912.

AS already announced in these columns, the United States Army is experimenting with branding horses by indelible ink on the inside of the upper lip. It is not intended that this brand should displace the historic "U. S." branded on the left shoulder of all our army horses and mules, but it is to be used in place of the serial numbers now branded with a hot iron on the hoof for the identification of individual animals in all branches of the service. The hoof brand grows out and must be renewed about twice a year; the lip brand if clearly made, should last as long as the horse. Captain C. H. Conrad, Jr., of the quartermaster department has had special instruments made which do fairly satisfactory work in branding numbers up to a million. With the present instrument at times part of the figures fails to take, and it is necessary to repeat the operation, but as a whole the work is successful. In trials several hundred horses have been identified without a single mistake. Horses that were branded nearly two years ago show the numbers plainly.

EMPLOYMENT OF CAVALRY.

THE Secretary of War directs that the following be published:

With a view to standardizing the instruction imparted at the Military Academy and at the various Service Schools on the subject of the employment of Cavalry, the following is announced as the policy of the War Department in respect to the use of that arm.:

1. Mounted action in the main rôle of the cavalry arm and its organization, armament and instruction should be with a view to rendering it effective therein.

Dismounted action is, however, a very important rôle of the cavalry, and neither an organization nor the method of instruction which fails to provide for the effective use of cavalry dismounted will enable it to perform fully its function in war.

2. The organization should be such as to permit of the greatest mobility, which is the essential quality of the cavalry, while providing units of great smashing power in the charge and a sufficient number of rifles to make effective its use when required as a dismounted force.

3. Cavalry must maneuver freely and widely without fearing too much for its rear; and, being often at a distance from the main body of an army, its commander must be clothed with authority to conform to actual conditions.

4. While the chief task of the cavalry is to assist the other arms in accomplishing the common object, its rôle is often of primary importance. The action of cavalry must be bold and daring; it must whenever practicable assume the initiative, seeking out the enemy and placing him upon the defensive.

5. The principal weapon of cavalry in mounted action is the horse and the force of impact should be utilized to the utmost. The terrain and nature of the operations will determine which of the other weapons must be used.

6. When circumstances permit, cavalry opposed to cavalry should fight mounted, thus retaining the mobility and power of maneuver necessary to its security and success.

7. The historical value of cavalry, including the experience and evolution of our own and that of other countries, must be carefully studied, and due consideration should be given to the greater magnitude of our future cavalry operations as compared with our experiences since the Civil War.

The use to which cavalry should be put in campaign is summarized as follows:

- (a) To seek and destroy the enemy's cavalry.
- (b) Screening, contact, and reconnaissance.
- (c) Seizing and holding important advanced or isolated positions, thus delaying the advance of the enemy until the arrival of the other arms.

- (d) To operate on the flank and in the rear of the enemy.
- (e) Raids and other enterprises requiring great mobility.
- (f) The mounted charge at the opportune moment against infantry or field artillery.

(g) Energetic pursuit of a retreating enemy, or covering retreat of its own forces.

(h) When none of the above rules have been assigned to it, cavalry may go to the assistance (dismounted) of hard pressed infantry to fill gaps in the firing line.

(Signed,) LEONARD WOOD,
Major General, Chief of Staff.

CAVALRY RESERVE CORPS.

THE following comment has been received from a former officer of cavalry, who resigned to take up affairs in civil life which demanded his constant attention:

"I was much interested in the article in the last CAVALRY JOURNAL on the subject of a Reserve. It appealed to me as a most excellent scheme and one that would meet with approval generally. I for one would be eager to share in such a movement. My resignation did not by any means end my love and feeling for the cavalry, though it was best for me to end my active service therein.

"However, I should be glad to have some means by which I would be officially available. The only way now is that I presume my address is on file with my record in the War Department.

"My inclination was to join a militia troop, but I found that my time was not free enough for that. The plan outlined in the CAVALRY JOURNAL would keep me in touch with army affairs in a fashion quite different from that of keeping up with my friends, and reading the service papers.

"Two attractions occurred to me that might possibly aid in drawing enrollment: *First*, that officers of the Reserve

Corps be considered eligible to compete in military races and for the cups offered for chargers, etc.

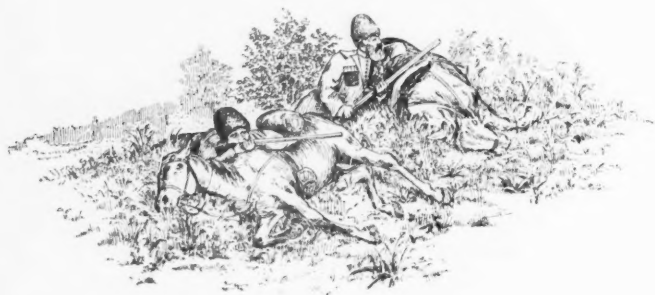
"*Second*, that such officers be authorized to attend maneuvers, attached to some troop of the nearest regular regiment.

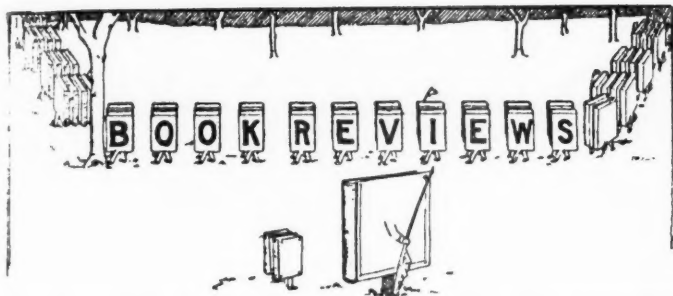
"Undoubtly many former officers would be as glad as I to have the chance to hear again the trumpet's call and to smell the dust of a marching column, who for sufficiently good reason found they must work out their careers in some other sphere than as officers of the active list of the cavalry arm."

NEW CARBINES IN THE JAPANESE ARMY.

From the *Yamato* of June 14, 1912.

THE pattern-44 carbines now under manufacture at the arsenal possess very different aspects when compared with the old ones. Heretofore, the weapons of cavalry have been only the saber and the gun. The new carbine, however, has a bayonet folded in the barrel for facilitating its conveyance, enabling the cavalry to charge the enemy at the point of bayonet. These new arms will be supplied to all the cavalry regiments at an early date.





**Our
Cavalry.***

This is an interesting book of 224 pages in which are discussed the armament of cavalry, the horse, the tactics of cavalry against cavalry, including the squadron, the regiment and the brigade with horse artillery; the duties of cavalry in a general engagement; its employment in campaign; the employment of horse artillery with cavalry; the duties of reconnaissance and protection; detached duties, raids, the training of the cavalry officer, of the squadron, the horse and the man.

The author says in his preface that "no attempt has been made to produce an exhaustive treatise on Cavalry; it has been written principally for junior officers of all arms."

In the introduction he gives a brief review of the development of cavalry since the time of Xenophon and gives the following "fixed principles" which have guided the great cavalry leaders of all ages.

- (a) Cohesion in the ranks or knee-to-knee riding.
- (b) The moral effect of advancing horsemen.
- (c) The flank march.
- (d) The apropos charge ridden well home.

*"OUR CAVALRY." By Major General M. F. Rimington, C. V. O., C. B. Macmillan Company, New York. Price, \$1.60, net.

- (e) Surprise.
- (f) The immediate rally.
- (g) The necessity of a reserve.
- (h) Training of the individual man and horse.
- (i) Care of the horses' condition.

In his discussion of armament, his opinion of the bayonet or the use of cavalry is expressed by quoting von Bernhardt, as follows:

"The hand to hand fight on foot must be exceptional. To injure the efficiency of troops for their daily rôle for the sake of such isolated occurrences, I hold to be a great mistake."

He concludes that the straight or thrusting sword is much more effective than the curved or cutting sword, and that while the lance is "the queen of weapons" it has several disadvantages and that the straight sword is the weapon "most likely to be useful on all occasions."

He does not consider the revolver suitable for use in ranks.

He believes the Irish horse of about 15-2 hands high the ideal horse for cavalry and would make this the maximum height. Chest measure as well as height, should be considered. He says that the large horse has not the stamina of the small horse and that in the South African War "many a cavalry officer had gladly exchanged his 16 hands horse for a Boer or Basuto pony of 14-2 hands high."

He considers absolute confusion one of the principle elements of success in the charge. The flank attack of the squadron, the regiment and the brigade are illustrated by means of diagrams.

He believes that fire action against rapidly moving cavalry is much less effective than is generally supposed and that in an action of cavalry against cavalry dismounted action should not be used if the ground is suitable for mounted action.

Under the heading: "A Cavalry Brigade in Action," the use of cavalry and horse artillery is illustrated by several examples with diagrams. The use of cavalry in the general engagement is illustrated by examples from the Franco-German

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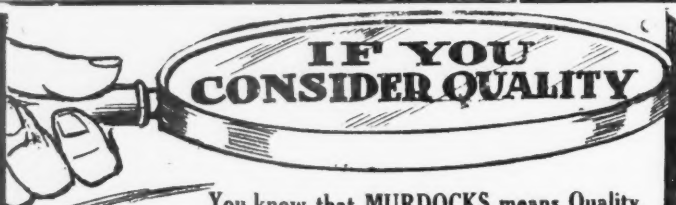
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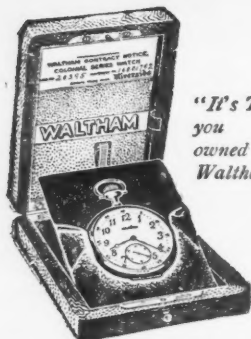
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War of 1870-71, the South African War and the Russo-Japanese War.

He gives us one of the reasons for lack of success in the South African War: "The training of cavalry regiments in small, flat, twelve acre drill fields, walled in from the slums of a city, in which cavalry are still stationed for hopelessly out of date political reasons. What real cavalry training was possible along the train lines and between rows of suburban villas?" Those who are advocating stationing our troops in cities would do well to consider this statement.

The author in discussing the use of horse artillery with cavalry in a general engagement says: "A conclusion early arrived at in the consideration of the rôle of the three arms on the modern battle-field is that no artillery and infantry force, however strong, can afford to enter upon a battle unless their flanks are protected by natural obstacles or by masses of cavalry. But battles, except where we adopt the defensive, are not fought where natural obstacles cover our flanks. Therefore, we must have sufficient cavalry if only to neutralize the enemy's cavalry, otherwise they will work round our flank and attack our reserves, and if they are accompanied by horse artillery, whilst our horse and field artillery is already engaged in the great battle, they possess a marked advantage over us."

In discussing the training of the officer, the squadron and the man, the author emphasizes the importance of initiative, self reliance and the thorough training of horse and man for all the duties that may be required in campaign.

**The
Russo-Japanese
War.***

The complete "Official Accounts" of the war in Manchuria published so promptly after the close of the war by the German and British General Staffs renders it an easy task to prepare secondary histories of this war of any desired length. Such secondary histories are useful to readers who have not time for the more extended and detailed "Official

*"THE RUSSO-JAPANESE WAR." The Campaign in Manchuria, 1904. Second part by Captain F. R. Sedgwick, R. F. A. Hugh Rees, Ltd. London. Price, 10 s, net.

Accounts" or for examination of first hand sources of information. The work of the Russo-Japanese War by Captain Sedgwick is in two volumes which form the 10th and 16th numbers of the "Special Campaign Series," published by George Allen & Company of London. The second volume on the Russo-Japanese War (16th number of the Special Campaign Series) has just reached us. It embraces the second period of the campaign in Manchuria, the period of the decisive battles of Liao Yang and Sha Ho, *i. e.*, from the 22d of August to the 17th of October, 1904. The author states in his preface that "the authority accepted has always been that of the British official account and the reports of British officers." The work consists of 347 pages of printed matter, good clear type on good paper. It is remarkable for the number and excellence of the maps accompanying it. There are twenty-one large detached maps making it necessary to have large map pockets on both the front and back covers. The maps have the positions of the opposing troops clearly indicated at various stages of the campaign, the Russian troops being shown in green and the Japanese in red. A note at the head of each chapter shows what maps are to be used in connection with the chapter, making it easy to follow the text at all times by reference to the proper map.

The text is well arranged and the author's style is concise and lucid. Frequent marginal headings enable the reader to find his way about. The operations described are frequently commented on and the criticisms and deductions are able and well written. Some idea of the author's style may be gained from the following extract (p. 69):

"Of these strong detachments Ljubavin and the Pensihu detachment opposed Umezawa's advance north. Otherwise they were wasted. Their duties could have been equally well performed by the Cossacks alone without infantry. This would have placed another eighteen battalions, about 10,000 to 11,000 bayonets, in Kuropatkin's reserve. This is a flagrant violation of a principle of the military art. Whose was the responsibility, Kuropatkin's, Alexiev's or the staff, it is impossible to say.

"To some extent, indeed to a great extent, the blame must be laid to the inherent disadvantages of the defensive attitude. A defensive attitude involves giving to the opponent the initiative. Consequently the side standing on the defensive does not know where the blow will fall. Instinctively it tries to guard all approaches. Rumor always exaggerates the numbers of the attacker. His advance troops appearing at many points are magnified into advance guards of strong columns. These disadvantages accompany the 'offensive-defensive' attitude as surely as they accompany the pure defensive," etc, etc.

**Head Hunters
of Northern
Luzon.***

This is an interesting book of over 300 pages which is finely illustrated by over sixty well executed cuts. It gives a graphic account of a trip made by the author through the mountains of Northern Luzon in 1910 with the Secretary of the Interior of the Philippine Islands, the Hon. Dean C. Worcester, when the latter was making his annual tour of inspection through these mountain provinces.

This part of Luzon has been visited very rarely by travelers, even by Americans on duty or living in the Philippines and the several tribes visited have been little known to the outside world except through vague reports and rumors for a century or more.

The habits, manner of living, traditions and history, as far as is known, of these so-called head hunters, and head-hunters they were formerly, as well as the terrain of this section of country are fully described. The progress that they have made towards civilization since the American occupation of the Islands are set forth and the problems to be solved in the future, as regards the welfare of these tribes, are commented upon.

*"THE HEAD HUNTERS OF NORTHERN LUZON." From Ifugao to Kalinga, A Ride Through the Mountains of Northern Luzon. With an Appendix on the Independence of the Philippines. By Cornelis De Witt Willcox, Lieutenant Colonel U. S. Army, Professor U. S. Military Academy and Officer d'Academie. Franklin Hudson Publishing Co., Kansas City, Mo., 1912. Price, \$1.50.

In the appendix, twenty-two pages are devoted to a thorough discussion of the important question of "The Independence of the Philippines," in which the author clearly demonstrates that the Filipinos, composed as they are of many different tribes, having no common language, and of different religious tendencies, are unfitted for the grave responsibilities of self-government. There is much food for thought as to future legislation for the benefit of these islanders contained in this appendix and it certainly will be well for our members of Congress to acquaint themselves with the arguments that are so ably set forth by the author.

**Memories of
Two Wars ***

This is a large book—6 in. by 9 in.—of over 450 pages, which is written in the unique and interesting style peculiar to General Funston. It is pathetically dedicated to the author's deceased little boy, Arthur McArthur Funston.

In the preface,[†] the author lays the blame for the appearance of this book on his publisher and disclaims any intention of discussing military strategy and tactics or of elucidating his personal views on our recent incursion into the realm of world-politics and reminds the reader that if he expects to find such therein, "this would be an excellent moment for him to put on his hat and return the volume to the neighbor from whom he borrowed it."

The work purports to be and it is a contribution to the literature of personal adventures in which the writer took such a prominent part. It is not intended as a history of the two wars—the Spanish American War and the Philippine Insurrection—in which General Funston was an active participant. The first part of this book is devoted to his experiences as a filibuster in Cuba and which appeared as a series of articles in *Scribner's Magazine*. The remaining portion of the book, and probably the most interesting part, relates exclusively to his

*"MEMORIES OF TWO WARS." Cuban and Phillipine experiences. By Frederick Funston, Brigadier General U. S. Army. Charles Scribner's Sons, New York.

experiences in the Philippines during the Spanish American War and the following Philippine Insurrection, and covers the period from the organization of his Volunteer Regiment, the Twentieth Kansas, to the capture of Aguinaldo and the closing days of the insurrection.

To the general reader the chapter on the capture of Aguinaldo will undoubtedly prove more interesting than those relating to the many combats of the insurrection, etc.

**Scout's
Handbook and
Instructor.***

A small book of 4 in. by 5½ in. and of 174 pages, excluding the very complete index. The author first points out, in his introduction, the necessity for having with an army in the field well trained and reliable scouts and the importance of having all soldiers trained in the duty of scouting. All men can not be made first class scouts, but all can, by training, be so taught as to greatly improve what natural ability they may have in this line. The author goes on to give the natural qualifications that a scout should have and those which he may acquire by instruction.

The table of contents, by chapters, is as follows: I. Reading signs and asking questions; II. Estimating and measuring distances and heights; III. Trailing; IV. Cover and Observation; V. Observation and Comprehension of Military features; VI. Making one's way Across Country; VII. Means and Methods of Reporting; Appendix: A. General information for reference; B. Reference for sketches; C. Questions for and suggestions to instructors.

While it might appear that there are many points considered, under the head of "*General Information*" that every school boy should know, such as, for instance, the table of linear measurements, how to find the circumference of a circle, how to measure wood, etc., etc., yet they are intended for use as references only and in instructing, in some cases, those who have had but limited education.

"SCOUTS' HANDBOOK AND INSTRUCTOR." By H. J. McKenney, First Lieutenant and Squadron Adjutant Thirteenth Cavalry U.S. Army. Franklin Hudson Publishing Co., Kansas City, Mo. Price, \$1.00.

Although the book is not intended as a text book for military sketchers, it is thought that the subject of "*References for Sketchers*" could have been made more complete with advantage; the scale of slopes and the other scales illustrated, should have been more fully explained and the definitions of "*Horizontal Equivalents*," "*Map Distances*" and "*Vertical Intervals*" should have been made clearer.

The back cover of the book is neatly prepared so that it can be used as a slope board or clinometer.

However, the book as a whole is well adapted for the purpose for which it is intended.





A CHIEF OF CAVALRY.

The translation from the *Revue de Cavalerie* appearing in this number of the CAVALRY JOURNAL, under the title of "Let Us Have a Chief" calls attention to the fact that this all-important subject has been neglected of late both by our contributors and the Association.

About a year ago, the Branch Cavalry Association at West Point, among other valuable suggestions, adopted the following:

"That every effort should be made to secure a permanent Chief of Cavalry with rank commensurate with the importance of his position and whose prominent duty should be to secure for the cavalry service the recognition it deserves in any general reorganization scheme, and especially that a sufficient force of cavalry should be provided for any field army for maintaining the due and proper proportion of cavalry as prescribed in the Field Service Regulations."

Now, that the question of a general scheme for the reorganization of our army is being discussed by the War Department authorities with a view of submitting the same to Congress at the coming session, it would appear that this is an opportune time to again agitate this heretofore much discussed and highly important subject.

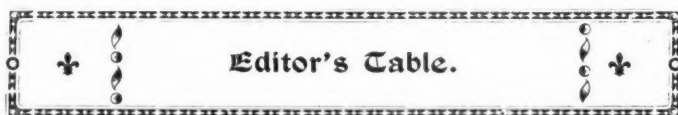
The arguments in favor of having such an official for each branch of the mobile army, but more especially and particularly for the cavalry service, are so numerous and have been so fully discussed in these columns in the past, that it would seem hardly necessary to set them forth again.

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However, in order that our members may refresh their memory as to the more salient points, a few quotations from the articles and editorials from the many that have appeared will be repeated here:

"It will be remembered that the cavalry service was neglected and belittled in the early days of the Civil War. The few cavalry that were in service then were frittered away in useless details. Recruiting for the cavalry was ignored; the formation of a cavalry corps was not dreamed of, and one of our most prominent generals is said to have declared that he did not need cavalry. As a result campaigns were undertaken with practically no cavalry; armies executed marches in four days that should have taken but one day; an army halted for a month in the face of a force which could not have stopped it for a day; an army took several days forming line of battle within sight of the camps of an enemy and then surprised that enemy without its presence being known or suspected; a defeated army fled in rout for twenty miles and was not destroyed.

"The establishment of the Cavalry Bureau in 1863 gave an importance to this arm which it had never before possessed. Although the first idea was suggested by the necessity for a remount system, its influence was extended. The cavalry was soon heard from in the field and by the defeat of the opposing cavalry and the killing of its leader, it prepared the way for the success of the Federal Army."

"The necessity of a Chief of Cavalry at the present time is great. When we consider that we agree with no other country in the world in many vitals of cavalry organization, armament and equipment, we may well wonder whether we can afford to ignore questions which have received the best study of the brightest men of other lands than ours. * * *

"The experience of the army since the Chief of Artillery has been designated ought to be sufficient to make us put all our efforts to the work of securing the same advantage for the cavalry. The artillery is now the foremost arm of the service, due almost entirely to the intelligent work of its chief.

"As long as the cavalry is without a chief we will continue to be orphans, with few friends, forgetful of the lessons of history and without hope for the future."

"It is revealing no secret to say that, by virtue of our geographical position and the extent of possible theaters of operations in the future, no nation is "under greater moral, political and military obligations than the United States to see that its cavalry is in entire harmony as to its organization, administration and field fitness with the demands of modern warfare.

"We are also under obligations to profit by what this country and other great states have learned in the stern school of war. Germany, France, Russia and Italy have each a special head for its cavalry.

"It is my sincere conviction that, due to our political and geographical conditions, and to precautions that should be taken to meet possible war events, the United States ought, above all countries, to give special attention to its cavalry, and I know of no course that would better and more quickly effect this than to allot to it a skillful head.

"A Chief of Cavalry, subject to the limitations imposed by the Secretary of War and the Chief of Staff, should be empowered to make inspections of the cavalry arm and correct defects, or take action at once on all important matters reported by other inspectors."

Many other quotations could be made that favor this project but it is believed that the above are sufficient to start the ball rolling.

In the mind of the writer, the most important duties of a Chief of Cavalry would be those of inspecting, at least once each year, every cavalry command in our army, at any rate every cavalry command within the continental limits of the United States. Inspectors who have been trained in other branches of the service are not competent inspectors of cavalry any more than would a cavalryman make a good inspector of other arms. Not only this but every cavalry command should be inspected by the same inspector. This to see that all are being properly instructed and that none of the manifold duties of a cavalryman are neglected. It is well known that many troop and regimental commanders run to fads and work to perfect their commands in some one or more lines to the neglect of others that are equally or more important.

While it is well that individual commanders, particularly troop commanders, should be allowed much leeway in the instruction of their commands and they be held responsible for results only, yet this should not be permitted to the extent of neglecting any particular line of instruction. Some, if allowed, will devote their principal attention to horse training, others to target practice, to field exercises and occasionally, not often, one will be found that delights in instructing in the use of the saber and its use in the charge. A Chief of Cavalry or an Inspector of Cavalry, whichever term you choose to apply to this official, could correct all these defects and bring our small cavalry force, small as compared with what we will need in war, into a well trained efficient corps.

EUGENICS VERSUS EUTHENICS.

The article appearing in this number of the *CAVALRY JOURNAL*, by Major Alonzo Gray, under the title of "A Soldier Colony" opens up a new line of thought that is certainly unique and interesting, even if the scheme should be deemed impractical.

For many years it has been maintained by those who favored compulsory military service that, in those countries where it obtains, particularly in Germany, the race is improved both physically and morally by such universal service in their armies. If such is the case, and there is no doubt as to its correctness, this question comes clearly under the head of Euthenics, or the science of race improvement through environment, in contradistinction to Eugenics which deals with race improvement through heredity.

On the other hand the successful breeder and agriculturist, has ever had in mind the motto to "Breed only from the best," whether that which he produces be horses, hogs, corn or other products. If this be a correct rule as regards commercial products, why is it not equally true as regards the raising of children, in other words, the improvement of the human race.

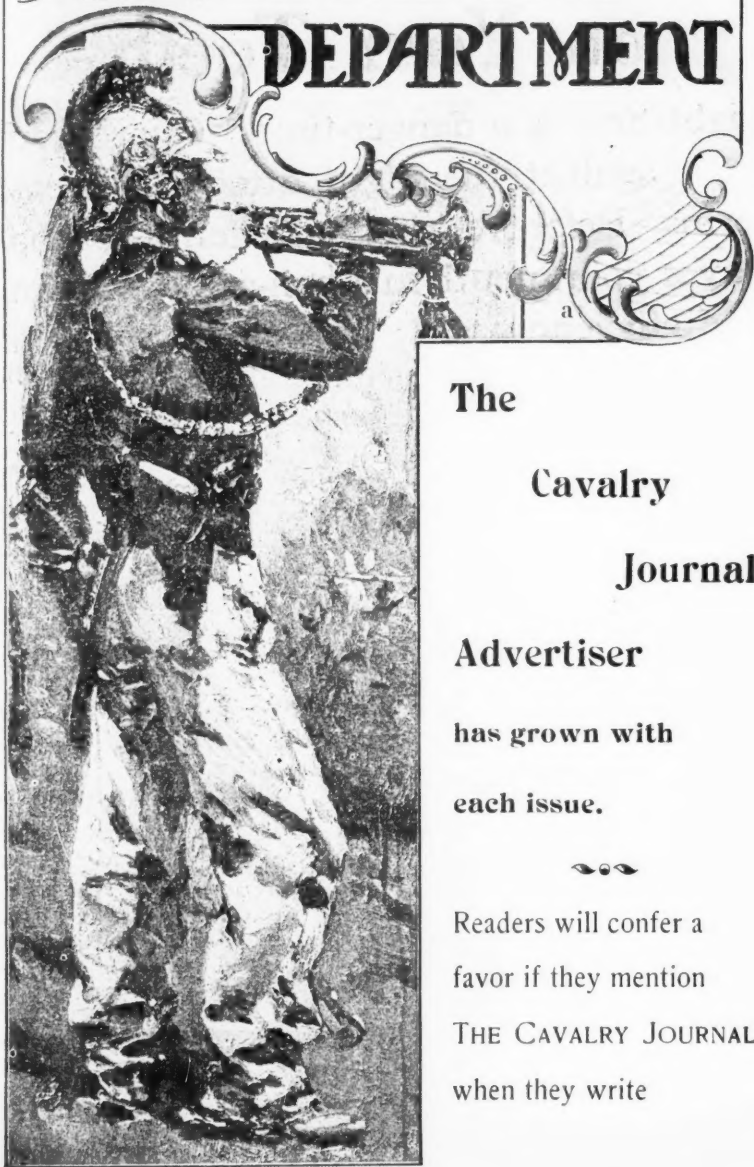
The Eugenist, pure and simple, believes that surroundings has little or no influence in improving the human race and that heredity is everything. It is possible and even probable that both influences have their effect and that, therefore, the Eugenist and Euthenist should work hand in hand for the advancement of civilization.

An article on this subject in a recent number of the *Popular Science Monthly* discusses fully the relative importance of these two subjects and points emphatically to the ever increasing dangers that threaten this country through the decreasing birth rate among the better classes, particularly among the well-to-do, the artisans and the professional classes, while on the other hand, the birth rate among the pauper and criminal classes is on the increase. Moreover, it is shown that the population of this country is deteriorating as to the qualities that goes to make good citizens through the immigration of these undesirable classes, although attempts, unsuccessful attempts they claim, are being made to restrict the immigration of such undesirables.

While this is not a cavalry subject, it is one that gives occasion for serious thought by those interested, as we should all be, in the future welfare of this nation.



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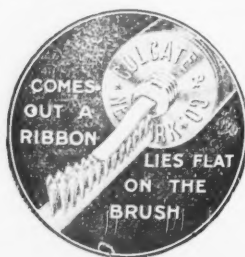
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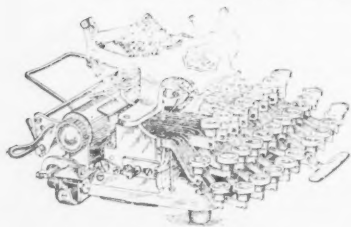
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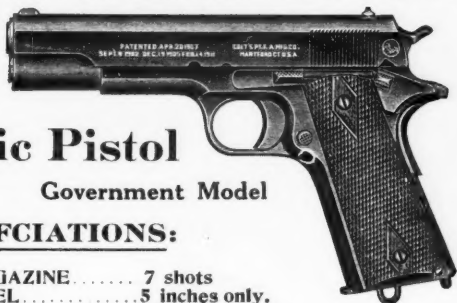
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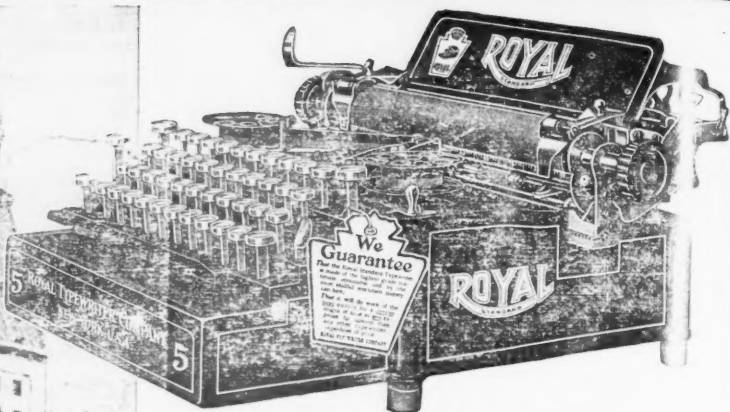
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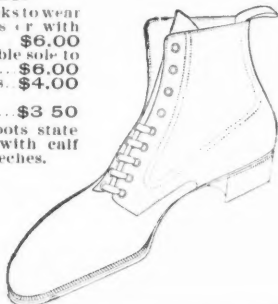
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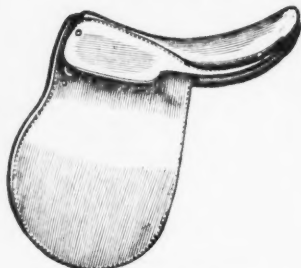
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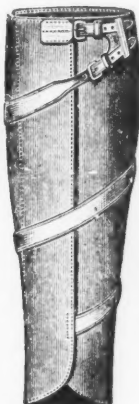
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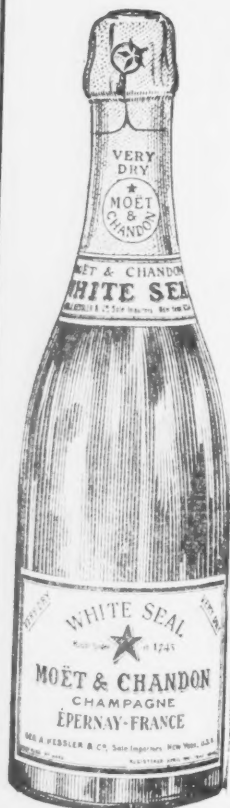
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